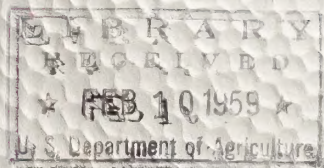


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Gloeckner



Fred C.
Gloeckner
&
Company
Incorporated
15 EAST 26th ST., NEW YORK 10, N. Y.

CHRYSANTHEMUM MANUAL

1959



Fred C.
Gloeckner
&
Company,
Incorporated

15 EAST 26th STREET
NEW YORK 10, NEW YORK

Telephone: ORegon 9-6460-6461
Cable Address: GLOECKNERS, N. Y.

TERMS OF SALE

Fifty rooted cuttings of each variety is the minimum that can be supplied. More than 50 of a variety must be in multiples of 50.

Any changes or cancellation of chrysanthemum orders must be received at least 30 days before shipping date. Every effort is being made to deliver stock which is free from pests, but purchases must be made with the understanding that we assume no responsibility for losses which may result from same.

To facilitate deliveries, cuttings will be shipped on Monday and Tuesday of each week. However, we will gladly make shipment on Friday or Saturday, if specifically requested and provided the order is received one month prior to the requested shipping date.

WARRANTY AND LIMITATION OF LIABILITY: Subject to the limitations of liability herein set forth, we warrant that the seeds, plants or bulbs sold are as described on the container, within recognized tolerances. Our liability on this warranty is limited in amount to the purchase price of the seeds, plants or bulbs. In no event shall we be liable for the crop, or for any loss due to the failure, impairment or quality thereof or varietal variance therein, whether such loss results from breach of the foregoing warranty, from breach of any other provision of the buyer's contract for purchase of said seeds, plants or bulbs, or from any other cause.

PRICES SUBJECT TO CHANGE
WITHOUT NOTICE

OUR TWENTY-FIFTH YEAR

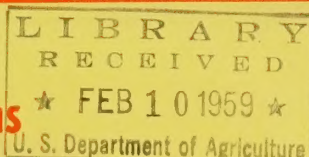
In marking the anniversary of our first 25 years in business, one cannot help but reflect on the far-flung changes that have taken place during that period in the methods of operation of our Customers, the growers. Twenty-five years ago, growers were beginning to realize the value of research in production methods. In the intervening years the results of research have included bombs and numerous potent materials for pest control; manipulation of day-length and temperature for year-round flowering of cut and pot chrysanthemums; automatic watering and injection fertilizing; air conditioning, misting, etc., to name but a few.

Conspicuous crop changes were made during the same period. Green plants came into their own as a standard household item. Year-round pot mums and azaleas boomed. Most conspicuous of the many cut flower cropping changes were the development of the southern-grown gladiolus industry to make the glad a year-round commodity, and, of course, the development of year-round standard and pompon chrysanthemum production throughout the country.

During the past 25 years, we hope that we as a firm have contributed in a modest way at least to the progress and development of the flower business. In observing this anniversary it probably would not have been difficult to collect congratulatory letters from important industry figures, but to us it seems more pertinent to merely rededicate ourselves to providing new and more effective services during the next 25 years.

This anniversary does give us a special opportunity to wholeheartedly thank our Customers, the growers who have made possible the development of our business.

Fred C. Gloeckner



Year-Round Flowering of Chrysanthemums

For the past twelve years we have seen cut chrysanthemums on the markets every month of the year. To assure high quality cut flowers the plants must be grown under optimum conditions. By optimum conditions we refer particularly to the basic conditions of a good soil, the disease-free condition of the plant material, the absence of any checks in growth from stock plant to the mature flowering plant, adequate means of temperature control for all stages of growth and the selection of the right varieties out of each group for the respective flowering periods. It is with this in mind that we prepare this Manual.

Response Group

Prior to year-round flowering of chrysanthemums, we

referred to varieties as to their natural flowering date. Now that year-round flowering is in general use, we refer to a variety as to its response to short-day treatment. When we say 9 week response, we mean that it will bloom 9 weeks after the short-day treatment is started. A 13-week group requires 13 weeks after short-day treatment is started, and so on with all the other response groups.

Daylength Control

When chrysanthemums are grown around the year, it is very necessary that we know when to apply shade or light to make the plants respond as we desire. The following schedule will give you the proper dates for lighting and shading for each response group.

YEAR-ROUND LIGHTING AND SHADING SCHEDULE

Response Group	Shading to Stop in Fall	Lighting to Start in Fall	Shading to Start in Spring	Lighting to Stop in Spring
7 week	Aug. 24	July 13	Apr. 13	June 1
8 week	Aug. 31	July 20	Apr. 6	May 25
9 week	Sept. 7	July 27	Mar. 30	May 18
10 week	Sept. 14	Aug. 3	Mar. 23	May 11
11 week	Sept. 21	Aug. 10	Mar. 16	May 4
12 week	Sept. 28	Aug. 17	Mar. 9	Apr. 27
13 week	Oct. 5	Aug. 24	Mar. 2	Apr. 20
14 week	Oct. 12	Aug. 31	Feb. 23	Apr. 13

Lighting

The chrysanthemum is generally referred to as a short day plant but it is rightfully a long night plant. It requires a long night period of at least twelve hours or more to bud and flower properly. When we want to prevent bud initiation we should reduce the night period to at least seven hours. This is done by lighting the plants three to four hours each night, starting at 10 p.m.

To prevent the initiation of flower buds, the light intensity must not be lower than 7 foot-candles. When growing seven or eight week varieties this minimum should be 9 foot-candles.

Usually we figure that it requires $1\frac{1}{4}$ watts per sq. ft. of area covered; that includes benches and walks. When lighting a single bench 42 inches to 48 inches

wide use 60-watt lamps in a reflector, spaced 4 feet apart, 2 to 3 feet above the tops of the plants. For two benches 42 to 48 inches wide use 100-watt lamps in a reflector, spaced 6 feet apart, 2 to 3 feet above the tops of the plants.

Lights must be used according to the schedule above. It has been found that best results are secured by interrupting the night. Begin lighting at 10 p.m. for the number of hours shown below:

ADDITIONAL LIGHTING SCHEDULE

- 3 Hours during the months of August, September, October, March, April and May.
- 4 Hours during the months of November, December, January and February.

Year-Round Flowering of Chrysanthemums

Shading

Use a good durable **Black Cloth** which when applied will reduce the light intensity to 2 foot-candles or less. More light intensity than this will result in delayed flowering and unevenness of bloom.

The cloth should be applied at 5 p.m. and removed at 8 a.m. When the temperature is above 90 degrees at 5 p.m. delay the application of the cloth until 6 or 7 p.m. This will reduce the heat under the cloth and yet produce twelve hours or more of night necessary for proper development. Continue covering each evening on pompons until the latest buds show color and most of the flowers are well developed. For large flowering varieties, shading can be discontinued after all flowering buds have attained the diameter of approximately one-half inch.

Be sure that covering is complete on all benches shaded, as any leaks in light will cause uneven spots in the bench at blooming time.

Black cloth should be applied each evening. Missing one night a week will give fair results, but delayed flowering results when cloth is not applied each evening.

Temperature Control

For inter-connected units or crops at different stages of development the most efficient and effective temperature recommendations we can make are **cool 60° crops**. The house temperature is run at a straight 60° level night and day, cloudy or sunny. This is the lowest, safest minimum. It is the night temperature that counts. Eliminating fluctuation promotes steady, gradual growth. Keeping day temperatures down encourages more ventilation with corresponding reduction in relative humidity. This promotes stronger, heavier stems. On very bright days temperatures will frequently go

higher but this should be due to radiant heat from the sun rather than convective greenhouse heat.

Excessive high temperatures prohibit the bud development, and during seasons of 90 degree night temperatures, it is suggested that the black cloth be raised after twilight and lowered again in the morning before daylight. This cooler temperature hastens the development of the buds. Air conditioning greenhouses has made it possible to grow chrysanthemums in locations where natural high temperatures prohibited the development of this crop.

Selection and Varieties

The careful selection of varieties in year-round flowering is very important. An intimate knowledge of varieties will eliminate the pitfalls associated with this crop. Knowing how to select varieties on the basis of response groups is equally as important as selecting varieties that will respond out of season.

In latitudes where seasons, temperature and light conditions are variable, it is to any grower's advantage that he grow only those varieties that will provide the highest yields and best quality for each period of the year.

The South is of course more fortunate in that light duration there and intensity fluctuates less than is experienced in the North, and even though only three or four response groups are used during a 52-week period, the need for meticulous varietal planning is just as important as it is for any one period in the North.

Your **Gloeckner** representative is well equipped to furnish you the details and the proper varieties for each particular flowering date. His intimate knowledge will eliminate the guess work associated with mum programming.



Well Grown Year-Round Crops — Note lights and black cloth

Year-Round Flowering of Chrysanthemums

INTERRUPTED LIGHTING FOR WINTER STANDARDS

When flowering December thru March crops of the standard varieties Indianapolis, Queen's and Mefo's the use of interrupted lighting has been tested and is recommended as a means of increasing petallage. This materially improves the appearance of the flower reducing the effect of decreased petallage and quilling known to be associated with abrupt shade during the short days of the winter period.

The essential requirements are:

1. Units planted to only the above mentioned varieties. The procedure has not been thoroughly tested on spray varieties or other standard varieties.
2. Accurate control of temperature. A 60° minimum night at all positions within the unit plus correspondingly higher day temperatures. Cloudy days were run at the 60° minimum. Bright days were between 65°-70°.
3. A rigid adherence to scheduled timing recommendations with interruption.
4. No extreme temperature reduction at or near the finish of the crop. Low temperature is known to be partly responsible for an increase of quilling in the Indianapolis varieties. A minimum of 55° is satisfactory only after buds show some color.

5. The method recommended is as follows:

For any given crop to be flowered during the **December through March** period determine from the schedule the date lights are stopped. Count back twelve (12) days and on this date start and maintain nine (9) continuous short days of no lights. At the end of this nine (9) short day period run twelve (12) continuous days of lights on. Then turn lights out and maintain normal short days.

Thus the total number of long days as called for by the schedule remains the same. This second long day period immediately following the first short day period of nine (9) days serves to slow down the early bud development stage resulting in a petallage increase of approximately 50%.

To illustrate: For flowering Indianapolis White (10 week) for December 14 the schedule calls for October 6 lights out. Counting back twelve (12) days gives September 23. Therefore run short days from September 23 to and including October 1 (9 continuous short days). Starting October 2, run twelve (12) long days to and including October 13. On October 14 start the final and continuous short day period. This is the nine (9) short day—twelve (12) long day formula for interrupted lighting.

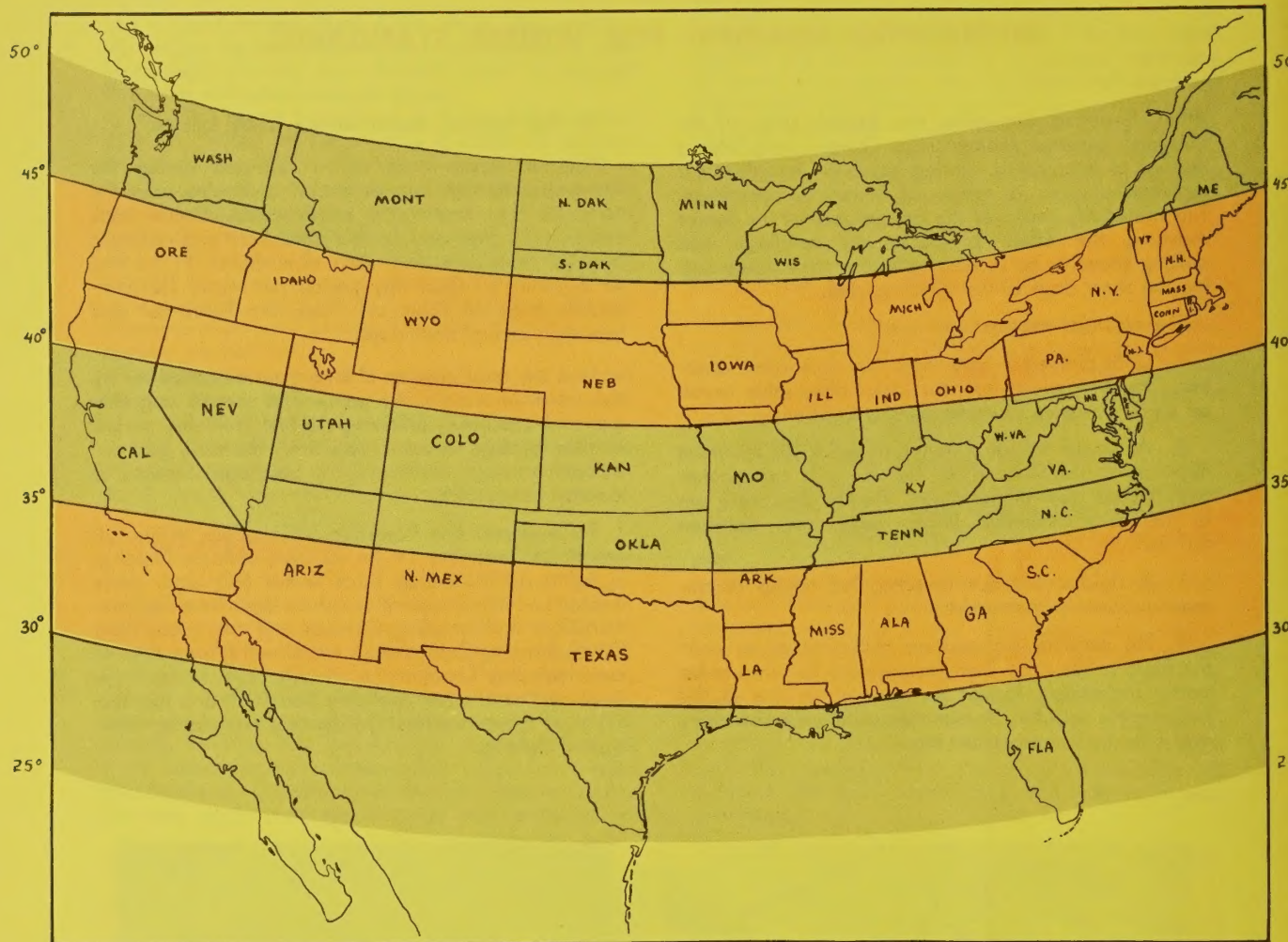


*Well Grown House of Indianapolis
For January Bloom*



Supporting Standards with Wires and Cross Strings

Year-Round Flowering of Chrysanthemums



Copyright 1951 Fred C. Gloeckner & Co. INC



Standards in Saran House Protected with Polyethylene after Color Developed



THE MAP ABOVE WILL ASSIST YOU IN LOCATING THE LATITUDE IN WHICH YOUR GREENHOUSE IS LOCATED. YOU NEED THIS INFORMATION TO USE THE FLOWERING SCHEDULES THAT FOLLOW ON THE NEXT PAGES.

Year-Round Chrysanthemum Flowering Schedule

BLOOM JANUARY 4, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 17	Sept. 7	Aug. 31—Sept. 28	no	14 Week
			Aug. 24—Oct. 5	no	13 Week
			Aug. 17—Oct. 12	no	12 Week
			Aug. 17—Oct. 19	no	11 Week
			Aug. 17—Oct. 26	no	10 Week
35-40°	Aug. 24	Sept. 14	Aug. 31—Sept. 28	no	14 Week
			Aug. 24—Oct. 5	no	13 Week
			Aug. 24—Oct. 12	no	12 Week
			Aug. 24—Oct. 19	no	11 Week
			Aug. 24—Oct. 26	no	10 Week
30-35°	Aug. 31	Sept. 21	Aug. 31—Oct. 5	no	13 Week
			Aug. 31—Oct. 12	no	12 Week
			Aug. 31—Oct. 19	no	11 Week
			Aug. 31—Oct. 26	no	10 Week
25-30°	Sept. 7	Sept. 28	Sept. 7 —Oct. 12	no	12 Week
			Sept. 7 —Oct. 19	no	11 Week
			Sept. 7 —Oct. 26	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory Wh. Peter John	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel. Chat'n'ga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo
	P	Ill. Brighteyes Yel. Riviera Sun Valley	Coronation Gold Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf Br. Peter John	Valentine Calvert's Or'ge	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homespun	Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S		Pink Peter John	Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Legend Delmar Empress	Rhythm Vedova Staccato Blue Skies Celebrity	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM JANUARY 11, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 17	Sept. 7	Aug. 31—Oct. 5	no	14 Week
			Aug. 24—Oct. 12	no	13 Week
			Aug. 17—Oct. 19	no	12 Week
			Aug. 17—Oct. 26	no	11 Week
			Aug. 17—Nov. 2	no	10 Week
35-40°	Aug. 24	Sept. 14	Aug. 31—Oct. 5	no	14 Week
			Aug. 24—Oct. 12	no	13 Week
			Aug. 24—Oct. 19	no	12 Week
			Aug. 24—Oct. 26	no	11 Week
			Aug. 24—Nov. 2	no	10 Week
30-35°	Aug. 31	Sept. 21	Aug. 31—Oct. 12	no	13 Week
			Aug. 31—Oct. 19	no	12 Week
			Aug. 31—Oct. 26	no	11 Week
			Aug. 31—Nov. 2	no	10 Week
25-30°	Sept. 14	Oct. 5	Sept. 14—Oct. 19	no	12 Week
			Sept. 14—Oct. 26	no	11 Week
			Sept. 14—Nov. 2	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory Wh. Peter John	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitotop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel. Chattanooga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo
	P	Ill. Brighteyes Yel. Riviera Sun Valley	Coronation Gold Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Omega Yellow Galaxy	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift
BRONZE & RED	S		Oak Leaf Br. Peter John	Valentine Calvert's Or'ge	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homesp'n	Christmas Star Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S		Pink Peter John	Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Eminence Pink Snowdrop Debutante Prom	Legend Delmar Empress	Rhythm Vedova Staccato Blue Skies Celebrity

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM JANUARY 18, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 24	Sept. 14	Aug. 31—Oct. 12	no	14 Week
			Aug. 24—Oct. 19	no	13 Week
			Aug. 24—Oct. 26	no	12 Week
			Aug. 24—Nov. 2	no	11 Week
			Aug. 24—Nov. 9	no	10 Week
35-40°	Aug. 31	Sept. 21	Aug. 31—Oct. 12	no	14 Week
			Aug. 31—Oct. 19	no	13 Week
			Aug. 31—Oct. 26	no	12 Week
			Aug. 31—Nov. 2	no	11 Week
			Aug. 31—Nov. 9	no	10 Week
30-35°	Sept. 7	Sept. 28	Sept. 7 —Oct. 19	no	13 Week
			Sept. 7 —Oct. 26	no	12 Week
			Sept. 7 —Nov. 2	no	11 Week
			Sept. 7 —Nov. 9	no	10 Week
25-30°	Sept. 21	Oct. 12	Sept. 21—Oct. 26	no	12 Week
			Sept. 21—Nov. 2	no	11 Week
			Sept. 21—Nov. 9	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory Wh. Peter John	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel. Chattanooga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Melo Cream Melo
	P	Ill. Brighteyes Yel. Riviera Sun Valley	Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf Br. Peter John	Valentine Calvert's Or'ge	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homespun	Christmas Star Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S		Pink Peter John	Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Eminence Pink Snowdrop Debutante Prom	Legend Delmar Empress	Rhythm Vedova Staccato Blue Skies Celebrity
					Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM JANUARY 25, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 31	Sept. 21	Aug. 31—Oct. 19	no	14 Week
			Aug. 31—Oct. 26	no	13 Week
			Aug. 31—Nov. 2	no	12 Week
			Aug. 31—Nov. 9	no	11 Week
			Aug. 31—Nov. 16	no	10 Week
35-40°	Sept. 7	Sept. 28	Sept. 7—Oct. 19	no	14 Week
			Sept. 7—Oct. 26	no	13 Week
			Sept. 7—Nov. 2	no	12 Week
			Sept. 7—Nov. 9	no	11 Week
			Sept. 7—Nov. 16	no	10 Week
30-35°	Sept. 14	Oct. 5	Sept. 14—Oct. 26	no	13 Week
			Sept. 14—Nov. 2	no	12 Week
			Sept. 14—Nov. 9	no	11 Week
			Sept. 14—Nov. 16	no	10 Week
25-30°	Sept. 21	Oct. 12	Sept. 21—Nov. 2	no	12 Week
			Sept. 21—Nov. 9	no	11 Week
			Sept. 21—Nov. 16	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitotop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel. Chattanooga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Mefo Cream Mefo
	P	Ill. Brighteyes Yel. Riviera	Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf	Valentine Calvert's Gold	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homespun	Christmas Star Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Eminence Pink Snowdrop Debutante Prom	Rhythm Vedova Staccato Blue Skies Celebrity	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 1, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 31	Sept. 21	Aug. 31—Oct. 26	no	14 Week
			Aug. 31—Nov. 2	no	13 Week
			Aug. 31—Nov. 9	no	12 Week
			Aug. 31—Nov. 16	no	11 Week
			Aug. 31—Nov. 23	no	10 Week
35-40°	Sept. 7	Sept. 28	Sept. 7—Nov. 2	no	13 Week
			Sept. 7—Nov. 9	no	12 Week
			Sept. 7—Nov. 16	no	11 Week
			Sept. 7—Nov. 23	no	10 Week
30-35°	Sept. 21	Oct. 12	Sept. 21—Nov. 2	no	13 Week
			Sept. 21—Nov. 9	no	12 Week
			Sept. 21—Nov. 16	no	11 Week
			Sept. 21—Nov. 23	no	10 Week
25-30°	Sept. 28	Oct. 19	Sept. 28—Nov. 9	no	12 Week
			Sept. 28—Nov. 16	no	11 Week
			Sept. 28—Nov. 23	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel. Chattanooga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo
	P	Ill. Brighteyes Yel. Riviera	Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf	Valentine Calvert's Gold	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homespun	Christmas Star Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Pink Snowdrop Debutante Prom Legend Delmar Empress	Rhythm Vedova Staccato Blue Skies Celebrity	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 8, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Sept. 7	Sept. 28	Sept. 7 —Nov. 2	no	14 Week
			Sept. 7 —Nov. 9	no	13 Week
			Sept. 7 —Nov. 16	no	12 Week
			Sept. 7 —Nov. 23	no	11 Week
			Sept. 7 —Nov. 30	no	10 Week
35-40°	Sept. 14	Oct. 5	Sept. 14—Nov. 9	no	13 Week
			Sept. 14—Nov. 16	no	12 Week
			Sept. 14—Nov. 23	no	11 Week
			Sept. 14—Nov. 30	no	10 Week
30-35°	Sept. 28	Oct. 19	Sept. 28—Nov. 9	no	13 Week
			Sept. 28—Nov. 16	no	12 Week
			Sept. 28—Nov. 23	no	11 Week
			Sept. 28—Nov. 30	no	10 Week
25-30°	Oct. 5	Oct. 26	Oct. 5 —Nov. 23	no	11 Week
			Oct. 5 —Nov. 30	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga December Glory	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P	Silversmith Snowcap Wh. Riviera	Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest	Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		Yel Chattanooga Golden Pearson Yellow Glory	Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Melo Cream Melo
	P	Ill. Brighteyes Yel. Riviera	Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf	Valentine Calvert's Gold	Ind. Bronze Copper Queen
	P	Br. Alvoda Topaz Ill. Homespun	Christmas Star Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Thanks, Pink Ed Seidewitz	Ind. Pink Orchid Queen
	P	Alvoda Dark Alvoda Riviera Rosalind	Pink Snowdrop Debutante From Legend Delmar Empress	Rhythm Vedova Staccato Blue Skies Celebrity	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 15, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Sept. 14	Oct. 5	Sept. 14—Nov. 16	no	13 Week
			Sept. 14—Nov. 23	no	12 Week
			Sept. 14—Nov. 30	no	11 Week
			Sept. 14—Dec. 7	no	10 Week
35-40°	Sept. 21	Oct. 12	Sept. 21—Nov. 16	no	13 Week
			Sept. 21—Nov. 23	no	12 Week
			Sept. 21—Nov. 30	no	11 Week
			Sept. 21—Dec. 7	no	10 Week
30-35°	Oct. 5	Oct. 26	Oct. 5—Nov. 23	no	12 Week
			Oct. 5—Nov. 30	no	11 Week
			Oct. 5—Dec. 7	no	10 Week
25-30°	Oct. 12	Nov. 2	Oct. 12—Nov. 30	no	11 Week
			Oct. 12—Dec. 7	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Markfeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo
	P Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest		Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S	Yel. Chattanooga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Mefo Cream Mefo
	P Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Omega Yellow Galaxy	Yel. Sculpture Yel. Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S	Oak Leaf	Valentine Calvert's Orange	Ind. Bronze Copper Queen
	P Christmas Star	Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Ind. Pink Orchid Queen
	P Pink Snowdrop Debutante Prom	Legend Delmar Empress	Rhythm Staccato Blue Skies	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 22, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Sept. 21	Oct. 12	Sept. 21—Nov. 23	no	13 Week
			Sept. 21—Nov. 30	no	12 Week
			Sept. 21—Dec. 7	no	11 Week
			Sept. 21—Dec. 14	no	10 Week
35-40°	Sept. 28	Oct. 19	Sept. 28—Nov. 30	no	12 Week
			Sept. 28—Dec. 7	no	11 Week
			Sept. 28—Dec. 14	no	10 Week
30-35°	Oct. 12	Nov. 2	Oct. 12—Nov. 30	no	12 Week
			Oct. 12—Dec. 7	no	11 Week
			Oct. 12—Dec. 14	no	10 Week
25-30°	Oct. 19	Nov. 9	Oct. 19—Dec. 7	no	11 Week
			Oct. 19—Dec. 14	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P Icecap Acclaim Snowstorm Illini Alba Northwind Satellite Snowcrest		Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S	Yel. Chattanooga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo
	P Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Omega Yellow Galaxy	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S	Oak Leaf	Valentine Calvert's Orange	Ind. Bronze Copper Queen
	P Christmas Star	Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Ind. Pink Orchid Queen
	P Pink Snowdrop Debutante Prom	Legend Delmar Empress	Rhythm Staccato Blue Skies	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 29, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Sept. 28	Oct. 19	Sept. 28—Nov. 30	no	13 Week
			Sept. 28—Dec. 7	no	12 Week
			Sept. 28—Dec. 14	no	11 Week
			Sept. 28—Dec. 21	no	10 Week
35-40°	Oct. 12	Nov. 2	Oct. 12—Dec. 7	no	12 Week
			Oct. 12—Dec. 14	no	11 Week
			Oct. 12—Dec. 21	no	10 Week
30-35°	Oct. 19	Nov. 9	Oct. 19—Dec. 7	no	12 Week
			Oct. 19—Dec. 14	no	11 Week
			Oct. 19—Dec. 21	no	10 Week
25-30°	Oct. 26	Nov. 16	Oct. 26—Dec. 14	no	11 Week
			Oct. 26—Dec. 21	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo
	P Icecap Snowstorm Illini Alba Northwind Satellite Snowcrest Acclaim		Jupiter Surfside Sculpture Belray	Whitetop Iceberg Illini Igloo Shasta Stardust
YELLOW	S	Yel. Chattanooga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo
	P Coronation Golden Acclaim Cinderella Spungold Corsair Yellow Snowcrest	Omega Yellow Galaxy	Yel. Sculpture Souvenir Esquire Shane Illini Goldrift	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S	Oak Leaf	Valentine Calvert's Orange	Ind. Bronze Copper Queen
	P Christmas Star	Galaxy Holiday Crackerjack	Br. Jubilation Thelma	Beauregard Br. Portrait Climax
PINK	S			Ind. Pink Orchid Queen
	P Pink Snowdrop Debutante Prom	Legend Delmar Empress	Rhythm Staccato Bue Skies	Portrait Profile Bonnie

S—Standard

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Year-Round Chrysanthemum Flowering Schedule

BLOOM MARCH 7, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Oct. 5	Oct. 26	Oct. 5 —Dec. 7	no	13 Week
			Oct. 5 —Dec. 14	no	12 Week
			Oct. 5 —Dec. 21	no	11 Week
			Oct. 5 —Dec. 28	no	10 Week
35-40°	Oct. 19	Nov. 9	Oct. 19—Dec. 14	no	12 Week
			Oct. 19—Dec. 21	no	11 Week
			Oct. 19—Dec. 28	no	10 Week
30-35°	Oct. 26	Nov. 16	Oct. 26—Dec. 14	no	12 Week
			Oct. 26—Dec. 21	no	11 Week
			Oct. 26—Dec. 28	no	10 Week
25-30°	Nov. 2	Nov. 23	Nov. 2 —Dec. 21	no	11 Week
			Nov. 2 —Dec. 28	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo
	P Icecap Acclaim Snowstorm Illini Alba Yukon Satellite Snowcrest	Champ Illini Glacier	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Shasta Stardust
YELLOW	S	D. Yel Chat'n'ga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Mefo Cream Mefo
	P Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Illini Wampum Omega Yellow Galaxy	Yel. Sculpture Yel. Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Golden Para.	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S	Oak Leaf	Valentine Calvert's Orange	Ind. Bronze Copper Queen
	P	Galaxy Holiday Crackerjack	Valentine Br. Jubilation Thelma Beauregard Sup.	Beauregard Br. Portrait
PINK	S			Ind. Pink Orchid Queen
	P Pink Snowdrop Debutante Prom	Legend Delmar Heritage	Jubilation Rhythm Staccato Blue Skies	Portrait Profile Bonnie

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM MARCH 14, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Oct. 12	Nov. 2	Oct. 12—Dec. 21	no	12 Week
			Oct. 12—Dec. 28	no	11 Week
			Oct. 12—Jan. 4	no	10 Week
35-40°	Oct. 26	Nov. 16	Oct. 26—Dec. 21	no	12 Week
			Oct. 26—Dec. 28	no	11 Week
			Oct. 26—Jan. 4	no	10 Week
30-35°	Nov. 2	Nov. 23	Nov. 2 —Dec. 28	no	11 Week
			Nov. 2 —Jan. 4	no	10 Week
25-30°	Nov. 16	Dec. 7	Nov. 16—Dec. 28	no	11 Week
			Nov. 16—Jan. 4	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo
	P	Icecap Acclaim Snowstorm Illini Alba Yukon Satellite Snowcrest	Champ Illini Glacier	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Shasta Stardust
YELLOW	S		D. Yel. Chaf'a'ga	Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Mefo Cream Mefo
	P	Coronation Golden Acclaim Cinderella Spungold Corsair Yel. Snowcrest	Illini Wampum Omega Yellow Galaxy	Yel. Sculpture Yel. Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Gol. Paramount	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S		Oak Leaf	Valentine Calvert's Or'ge	Ind. Bronze Copper Queen
	P		Galaxy Holiday Crackerjack	Valentine Br. Jubilation Thelma Beauregard Sup.	Beauregard Br. Portrait
PINK	S				Ind. Pink Orchid Queen
	P	Pink Snowdrop Debutante Prom	Legend Delmar Heritage	Jubilation Rhythm Staccato Blue Skies	Portrait Profile Bonnie

S—Standard

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Year-Round Chrysanthemum Flowering Schedule

BLOOM MARCH 21, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Oct. 19	Nov. 9	Oct. 19—Dec. 28	no	12 Week
			Oct. 19—Jan. 4	no	11 Week
			Oct. 19—Jan. 11	no	10 Week
35-40°	Nov. 2	Nov. 23	Nov. 2 —Jan. 4	no	11 Week
			Nov. 2 —Jan. 11	no	10 Week
30-35°	Nov. 9	Nov. 30	Nov. 9 —Jan. 4	no	11 Week
			Nov. 9 —Jan. 11	no	10 Week
25-30°	Nov. 23	Dec. 14	Nov. 23—Jan. 4	no	11 Week
			Nov. 23—Jan. 11	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week	9 Week
WHITE	S Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo Fred Shoemith	Queen's Lace
	P Champ Illini Glacier	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Shasta Stardust	
YELLOW	S Dk. Yel. Chaf'n'ga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Mefo Cream Mefo Yel. Shoemith	Luyona Gold Lace Yellow Lace
	P Illini Wampum Omega Yellow Galaxy	Yellow Sculpture Yellow Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Gol. Paramount	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday	
BRONZE & RED	S Oak Leaf	Valentine Calvert's Gold	Ind. Bronze Copper Queen	Mrs. Palmero Bronze Palmero
	P Galaxy Holiday Crackerjack	Valentine Br. Jubilation Thelma Beauregard Supr.	Beauregard Br. Portrait	
PINK	S		Ind. Pink Orchid Queen Pink F. Shoes'th	
	P Legend Delmar Heritage	Jubilation Rhythm Staccato Blue Skies	Portrait Profile Bonnie	

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Year-Round Chrysanthemum Flowering Schedule

BLOOM MARCH 28, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Nov. 2	Nov. 23	Nov. 2 —Jan. 11 Nov. 2 —Jan. 18	no no	11 Week 10 Week
35-40°	Nov. 9	Nov. 30	Nov. 9 —Jan. 11 Nov. 9 —Jan. 18	no no	11 Week 10 Week
30-35°	Nov. 23	Dec. 14	Nov. 23—Jan. 11 Nov. 23—Jan. 18	no no	11 Week 10 Week
25-30°	Nov. 30	Dec. 21	Nov. 30—Jan. 18 Nov. 30—Jan. 25 Nov. 30—Feb. 1	no no no	10 Week 9 Week 8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week	9 Week
WHITE	S Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Mefo Fred Shoesmith	Queen's Lace
	P Champ Illini Glacier	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Shasta Stardust	
YELLOW	S Dk. Yel. Chat'n'ga	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Mefo Cream Mefo Yel. Shoesmith	Luyona Gold Lace Yellow Lace
	P Illini Wampum Omega Yellow Galaxy	Yellow Sculpture Yellow Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Golden Param't	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday	
BRONZE & RED	S Oak Leaf	Valentine Calvert's Gold	Ind. Bronze Copper Queen	Mrs. Palmero Bronze Palmero
	P Galaxy Holiday Crackerjack	Valentine Br. Jubilation Thelma Beauregard Supr.	Beauregard Br. Portrait	
PINK	S		Ind. Pink Orchid Queen Pink F. Shoesmith	
	P Legend Delmar Heritage	Jubilation Rhythm Staccato Blue Skies	Portrait Profile Bonnie	

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Year-Round Chrysanthemum Flowering Schedule

BLOOM APRIL 4, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-45°	Nov. 9	Nov. 30	Nov. 9 —Jan. 18	no	11 Week
			Nov. 9 —Jan. 25	no	10 Week
35-40°	Nov. 16	Dec. 7	Nov. 16—Jan. 18	no	11 Week
			Nov. 16—Jan. 25	no	10 Week
30-35°	Nov. 30	Dec. 21	Nov. 30—Jan. 18	no	11 Week
			Nov. 30—Jan. 25	no	10 Week
			Nov. 30—Feb. 1	no	9 Week
25-30°	Dec. 7	Dec. 28	Dec. 7 —Jan. 25	no	10 Week
			Dec. 7 —Feb. 1	no	9 Week
			Dec. 7 —Feb. 8	no	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week
WHITE	S Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith	Queen's Lace
	P White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Viscount Shasta Stardust	White Keepsake Alaska
YELLOW	S Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Melo Cream Melo Yel. Shoesmith	Luyona Gold Lace Yellow Lace
	P Yellow Sculpture Yellow Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Golden Param't	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday	
BRONZE & RED	S Valentine Calvert's Orange	Ind. Bronze Copper Queen	Mrs. Palmero Bronze Palmero
	P Beauregard Supr. Br. Jubilation Thelma Ranger	Beauregard Br. Portrait Nectarine Climax	Resolute Wagonwheels
PINK	S	Ind. Pink Orchid Queen Pink F. Shoes'th	Bunbu
	P Jubilation Rhythm Staccato Blue Skies Celebrity	Delight Portrait Bonnie Pennant Linda Lou	

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P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM APRIL 11, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Nov. 16	Dec. 14	Nov. 16—Jan. 25	Mar. 14	11 Week
			Nov. 16—Feb. 1	Mar. 21	10 Week
			Nov. 16—Feb. 8	Mar. 28	9 Week
35-40°	Nov. 30	Dec. 28	Nov. 30—Jan. 25	Mar. 14	11 Week
			Nov. 30—Feb. 1	Mar. 21	10 Week
			Nov. 30—Feb. 8	Mar. 28	9 Week
30-35°	Dec. 7	Jan. 4	Dec. 7 —Feb. 1	Mar. 21	10 Week
			Dec. 7 —Feb. 8	Mar. 28	9 Week
			Dec. 7 —Feb. 15	Apr. 4	8 Week
25-30°	Dec. 21	Jan. 11	Dec. 21—Feb. 1	Mar. 21	10 Week
			Dec. 21—Feb. 8	No	8 Week
			Dec. 21—Feb. 15	No	9 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		11 Week	10 Week	9 Week
WHITE	S	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith	Queen's Lace
	P	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Viscount Shasta Stardust	White Keepsake Alaska
YELLOW	S	Harvester	Imp. Ind. Yel. Explorer Yellow Queen Yellow Melo Cream Melo Yellow Shoes'th	Luyona Gold Lace Yellow Lace
	P	Yel. Sculpture Yellow Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Gol. Paramount	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday	
BRONZE & RED	S	Valentine Calveri's Orange	Ind. Bronze Copper Queen	Mrs. Palmero Bronze Palmero
	P	Beauregard Supr. Br. Jubilation Thelma Ranger	Beauregard Br. Portrait Nectarine Climax	Resolute Wagonwheels
PINK	S		Ind. Pink Orchid Queen Pink F. Shoes'th	Bunbu
	P	Jubilation Rhythm Staccato Blue Skies Celebrity	Delight Portrait Bonnie Pennant Linda Lou	

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P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM APRIL 18, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Nov. 23	Dec. 21	Nov. 23—Feb. 1 Nov. 23—Feb. 8 Nov. 23—Feb. 15	Mar. 14 Mar. 21 Mar. 28	11 Week 10 Week 9 Week
35-40°	Dec. 7	Jan. 4	Dec. 7 —Feb. 1 Dec. 7 —Feb. 8 Dec. 7 —Feb. 15	Mar. 14 Mar. 21 Mar. 28	11 Week 10 Week 9 Week
30-35°	Dec. 14	Jan. 11	Dec. 14—Feb. 8 Dec. 14—Feb. 15 Dec. 14—Feb. 22	Mar. 21 Mar. 28 No	10 Week 9 Week 8 Week
25-30°	Dec. 28	Jan. 18	Dec. 28—Feb. 8 Dec. 28—Feb. 15 Dec. 28—Feb. 22	Mar. 21 Mar. 28 No	10 Week 9 Week 8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		11 Week	10 Week	9 Week
WHITE	S	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith	Queen's Lace
	P	White Taffeta Sculpture Ermine Jupiter Surfside Paramount Belray	Whitetop Tiptop Iceberg Illini Igloo Viscount Shasta Stardust	White Keepsake Alaska Silver Cloud Halo
YELLOW	S	Harvester	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo Yellow Shoesmith	Luyona Gold Lace Yellow Lace
	P	Yel. Sculpture Yellow Taffeta Esquire Gold Ball Shane Illini Goldrift Etude Lollipop Pippin Gol. Paramount	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday	Gold Coast Golden Herald Starbright Starlight
BRONZE & RED	S	Valentine Calvert's Gold	Dark Ind. Br. Copper Queen	Mrs. Palmero Bronze Palmero
	P	Beauregard Supr. Br. Jubilation Thelma Ranger	Beauregard Bronze Portrait Jeffire Climax	Resolute Wagonwheels Bronzechip Peach Chip
PINK	S		Ind. Pink Orchid Queen Pink F. Shoes'th	Bunbu Mary Garden
	P	Jubilation Rhythm Staccato Blue Skies Celebrity	Delight Portrait Bonnie Pennant Linda Lou	Bluechip Handsome

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM APRIL 25, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Dec. 7	Jan. 4	Dec. 7 —Feb. 15	Mar. 21	10 Week
			Dec. 7 —Feb. 22	Mar. 28	9 Week
			Dec. 7 —Feb. 29	Apr. 4	8 Week
35-40°	Dec. 14	Jan. 11	Dec. 14—Feb. 15	Mar. 21	10 Week
			Dec. 14—Feb. 22	Mar. 28	9 Week
			Dec. 14—Feb. 29	Apr. 4	8 Week
30-35°	Dec. 21	Jan. 18	Dec. 21—Feb. 15	Mar. 21	10 Week
			Dec. 21—Feb. 22	Mar. 28	9 Week
			Dec. 21—Feb. 29	Apr. 4	8 Week
25-30°	Jan. 4	Jan. 25	Jan. 4 —Feb. 15	Mar. 21	10 Week
			Jan. 4 —Feb. 22	Mar. 28	9 Week
			Jan. 4 —Feb. 29	Apr. 4	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		10 Week	9 Week	8 Week
WHITE	S	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith	Queen's Lace Marblehead Wh. Mary G'den	Wh. Pink Chief Silver Sheen
	P	Ping Pong Supr. Whitetop Iceberg Chalk Cliff Pacesetter Illini Igloo Viscount Shasta Stardust Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Memento Silver Cloud Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S	Imp. Ind. Yellow Explorer Yellow Queen Yellow Melo Cream Melo Yellow Shoes'th	Luyona Gold Lace Yellow Lace	Blazing Gold
	P	Goldtop Aztec Mary Hall Golden Bantam Yel. Beauregard Goldberg Sunfire Yellow Shasta Yellow Igloo Heyday Yel. Ill. Snowdrift Fanfare	Goldfinch Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Dandy Statesman Brilliancy Honeymoon	Yellow Calumet Topflight Yel. Silvertone
BRONZE & RED	S	Dark Ind. Bronze Normago Copper Queen	Mrs. Palmero Br. Palmero	Mayford Titan
	P	Nectarine Beauregard Wizard Climax Amberhue	Resolute Galefy Sybil Peachchip Wagonwheels	Calumet Dark Calumet Red Enterprise Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Pink F. Shoes'th Vanguard	Bunbu Mary Garden	Pink Chief
	P	Delight Portrait Bonnie Pennant Linda Lou	Pinkette Vogue Bluechip Handsome Tempo	Mayfair Enterprise Accolade Mirth

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM MAY 2, 1960

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Dec. 14	Jan. 11	Dec. 14—Feb. 22 Dec. 14—Feb. 29 Dec. 14—Mar. 7	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week
35-40°	Dec. 21	Jan. 18	Dec. 21—Feb. 22 Dec. 21—Feb. 29 Dec. 21—Mar. 7	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week
25-35°	Jan. 11	Feb. 1	Jan. 11—Feb. 22 Jan. 11—Feb. 29 Jan. 11—Mar. 7	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week

BLOOM MAY 9, 1960

40-50°	Dec. 28	Jan. 25	Dec. 28—Feb. 29 Dec. 28—Mar. 7 Dec. 28—Mar. 14	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week
35-40°	Jan. 4	Feb. 1	Jan. 4—Feb. 29 Jan. 4—Mar. 7 Jan. 4—Mar. 14	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week
25-35°	Jan. 18	Feb. 8	Jan. 18—Feb. 29 Jan. 18—Mar. 7 Jan. 18—Mar. 14	Mar. 21 Mar. 28 Apr. 4	10 Week 9 Week 8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoemith	Queen's Lace Marblehead Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Ping Pong Supr. Whitetop Iceberg Chalk Cliff Pacesetter Illini Igloo Viscount Shasta Stardust Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Memento Silver Cloud Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Imp. Ind. Yel. Explorer Yellow Queen Yellow Melo Cream Melo Yellow Shoes'th	Luyona Gold Lace Yellow Lace	Blazing Gold
	P Goldtop Aztec Mary Hall Golden Bantam Yel. Beauregard Goldberg Sunfire Yellow Shasta Yellow Igloo Heyday Yel. Ill. Snowdrift Fanfare	Goldfinch Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Dandy Statesman Brilliance Honeymoon	Yellow Calumet Topflight Yel. Silvertone
BRONZE & RED	S Dk. Ind. Bronze Nomago Copper Queen	Mrs. Palmero Bronze Palmero	Mayford Titan
	P Nectarine Beauregard Wizard Climax Amberhue	Resolute Gaiety Sybil Peachchip Wagonwheels	Calumet Dark Calumet Red Enterprise Talisman Paradise
PINK	S Ind. Pink Dk. Ore'd Queen Pink F. Shoes'th Vanguard	Bunbu Mary Garden	Pink Chief
	P Delight Portrait Bonnie Pennant Linda Lou	Pinkette Vogue Bluechip Handsome Tempo	Mayfair Enterprise Accolade Mirth

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM MAY 18, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Jan. 5	Feb. 2	Jan. 5 —Mar. 9	Mar. 23	10 Week
			Jan. 5 —Mar. 16	Mar. 30	9 Week
			Jan. 5 —Mar. 23	Apr. 6	8 Week
35-40°	Jan. 12	Feb. 9	Jan. 12—Mar. 9	Mar. 23	10 Week
			Jan. 12—Mar. 16	Mar. 30	9 Week
			Jan. 12—Mar. 23	Apr. 6	8 Week
25-35°	Jan. 26	Feb. 16	Jan. 26—Mar. 9	Mar. 23	10 Week
			Jan. 26—Mar. 16	Mar. 30	9 Week
			Jan. 26—Mar. 23	Apr. 6	8 Week

BLOOM MAY 25, 1959

40-50°	Jan. 19	Feb. 16	Jan. 19—Mar. 16	Mar. 23	10 Week
			Jan. 19—Mar. 23	Mar. 28	9 Week
			Jan. 19—Mar. 30	Apr. 6	8 Week
25-40°	Feb. 2	Feb. 23	Feb. 2 —Mar. 16	Mar. 23	10 Week
			Feb. 2 —Mar. 23	Mar. 28	9 Week
			Feb. 2 —Mar. 30	Apr. 6	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Imp. Ind. White Crystal Queen Mefo Fred Shoesmith	Queen's Lace Marblehead Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Iceberg Chalk Cliff Pacesetter Illini Igloo Shasta Stardust Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Memento Halo Alaska Thistledown	Echo Blizzard Pristine Silverstone
YELLOW	S Imp. Ind. Yellow Yellow Queen Yellow Mefo Cream Mefo Yellow Shoes'th	Luyona Gold Lace Yellow Lace Yel. Marblehead	Blazing Gold Butterball
	P Yellowtop Aztec Mary Hall Yel. Beauregard Yel. Iceberg Sunfire Yellow Shasta Yellow Igloo Heyday Yel. Ill. Snowdrift Fanfare	Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Dandy Statesman Brilliancy Honeymoon	Yellow Calumet Topflight
BRONZE & RED	S Dk. Ind. Bronze Nomago Copper Queen		
	P Nectarine Beauregard Giltglow Climax Amberhue	Resolute Gaiety Sybil Peachchip Wagonwheels	Calumet Dark Calumet Red Enterprise Talisman Paradise
PINK	S Ind. Pink Dk. Orc'd Queen	Bunbu Mary Garden	
	P Delight Portrait Bonnie Pennant Linda Lou	Pinkette Vogue Bluechip Handsome Tempo	Mayfair Enterprise Mirih

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM JUNE 1, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Feb. 2	Mar. 2	Feb. 2 —Mar. 23	Mar. 23	10 Week
			Feb. 2 —Mar. 30	Mar. 30	9 Week
			Feb. 2 —Apr. 6	Apr. 6	8 Week
25-40°	Feb. 9	Mar. 2	Feb. 9 —Mar. 23	Mar. 23	10 Week
			Feb. 9 —Mar. 30	Mar. 30	9 Week
			Feb. 9 —Apr. 6	Apr. 6	8 Week

BLOOM JUNE 8, 1959

25-50°	Feb. 16	Mar. 9	Feb. 16—Mar. 30 Feb. 16—Apr. 6 Feb. 16—Apr. 13	Mar. 30 Apr. 6 Apr. 13	10 Week 9 Week 8 Week
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BLOOM JUNE 15, 1959

25-50°	Feb. 23	Mar. 16	Feb. 23—Apr. 6 Feb. 23—Apr. 13 Feb. 23—Apr. 20	Apr. 6 Apr. 13 Apr. 20	10 Week 9 Week 8 Week
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*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Imp. Ind. White Crystal Queen	Queen's Lace Marblehead Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Iceberg Chalk Cliff Pacesetter Illini Igloo Shasta Stardust Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Memento Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Imp. Ind. Yellow Yellow Queen	Luyona Gold Lace Yellow Lace Yel. Marblehead	Blazing Gold Butterball
	P Yellowtop Aztec Mary Hall Yel. Beauregard Yel. Iceberg Sunfire Yel. Shasta Yel. Igloo Heyday Yel. Ill. Snowdrift Fanfare	Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Dandy Statesman Brilliance Honeymoon	Yellow Calumet Topflight
BRONZE & RED	S Dk. Ind. Bronze Nomago Copper Queen		
	P Nectarine Beauregard Giltglow Climax Amberhue	Resolute Gaiety Sybil Peachchip Wagonwheels	Calumet Dark Calumet Red Enterprise Talisman Paradise
PINK	S Ind. Pink Dk. Orc'd Queen	Bunbu Mary Garden	
	P Delight Portrait Bonnie Pennant Linda Lou	Pinkette Vogue Bluechip Handsome Tempo	Mayfair Enterprise Mirth

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Year-Round Chrysanthemum Flowering Schedule

BLOOM JUNE 22, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
25-50°	Mar. 2	Mar. 23	Mar. 2 —Apr. 13	Apr. 13	10 Week
			Mar. 2 —Apr. 20	Apr. 20	9 Week
			Mar. 2 —Apr. 27	Apr. 27	8 Week

BLOOM JUNE 29, 1959

25-50°	Mar. 9	Mar. 30	Mar. 9 —Apr. 20 Mar. 9 —Apr. 27 Mar. 9 —May 4	Apr. 20 Apr. 27 May 4	10 Week 9 Week 8 Week
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BLOOM JULY 6, 1959

25-50°	Mar. 16	Apr. 6	Mar. 16—Apr. 27 Mar. 16—May 4 Mar. 16—May 11	Apr. 27 May 4 May 11	10 Week 9 Week 8 Week
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*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross Sentinel Whirlwind	Marblehead Queen's Lace Themesong Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Tiptop Feathertop Iceberg Madonna Illini Igloo Shasta Stardust Illini Snowdrift	Popcorn White Popcorn Crystallite Keepsake Pinocchio Vesta Memento Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Yellow Betsy Ross	Yel. Marblehead Luyona Yellow Lace Good News Yel. Ivanhoe	Blazing Gold Butterball
	P Yellowtop Mary Hall Crescendo Yel. Beauregard Yel. Iceberg Sunfire Luxury Yellow Shasta Yellow Igloo Yel. Ill. Snowd'ft	Starlight Golden Herald Happiness Sunup Sauterne Gondola Dandy Brilliancy Statesman Honeymoon	Yellow Calumet Topflight
BRONZE & RED	S	Fred Yule	
	P Beauregard Butterscotch	Resolute Paxon Sybil	Calumet Dark Calumet
PINK	S Laughter	Bunbu	
	P Profile Pennant Cheerful	Pinkette Bluechip Reward Tempo	Mirth

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Year-Round Chrysanthemum Flowering Schedule

BLOOM JULY 13, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
25-50°	Mar. 23	Apr. 13	Mar. 23—May 4	May 4	10 Week
			Mar. 23—May 11	May 11	9 Week
			Mar. 23—May 18	May 18	8 Week

BLOOM JULY 20, 1959

25-50°	Mar. 30	Apr. 20	Mar. 30—May 4 Mar. 30—May. 11 Mar. 30—May 18	May 11 May 18 May 25	10 Week 9 Week 8 Week
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BLOOM JULY 27, 1959

25-50°	Apr. 6	Apr. 27	Apr. 6 —May 4 Apr. 6 —May 11 Apr. 6 —May 18	May 18 May 25 June 1	10 Week 9 Week 8 Week
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*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross Sentinel Whirlwind	Marblehead Queen's Lace Themesong Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Tiptop Feathertop Iceberg Madonna Illini Igloo Shasia Stardust Illini Snowdrift	Popcorn White Popcorn Crystallife Keepsake Pinocchio Vesta Memento Halo Alaska Thisledown	Echo Blizzard Pristine Silvertone
YELLOW	S Yellow Betsy Ross	Yel. Marblehead Luyona Yellow Lace Good News Yellow Ivanhoe	Blazing Gold Butterball
	P Yellowtop Mary Hall Crescendo Yel. Beauregard Yel. Iceberg Sunfire Luxury Yellow Shasta Yellow Igloo Yel. Ill. Snowdrift	Starlight Golden Herald Happiness Sunup Sauterne Gondola Dandy Brilliancy Statesman Honeymoon	Yellow Calumet Topflight
BRONZE & RED	S	Fred Yule	
	P Beauregard Butterscotch	Resolute Paxon Sybil	
PINK	S Laughter Vanguard	Bunbu	
	P Profile Pennant Cheerful	Pinkette Bluechip Reward Tempo	Mirth

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Year-Round Chrysanthemum Flowering Schedule

BLOOM AUGUST 3, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
25-50°	Apr. 13	May 4	Apr. 13—May 4 Apr. 13—May 11 Apr. 13—May 18	May 25 June 1 June 8	10 Week 9 Week 8 Week

BLOOM AUGUST 10, 1959

25-50°	Apr. 20	May 11	Apr. 20—May 4 Apr. 20—May 11 Apr. 20—May 18	June 1 June 8 June 15	10 Week 9 Week 8 Week
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BLOOM AUGUST 17, 1959

25-50°	Apr. 27	May 18	Apr. 27—May 4 Apr. 27—May 11 Apr. 27—May 18	June 8 June 15 June 22	10 Week 9 Week 8 Week
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*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross Sentinel Whirlwind	Marblehead Queen's Lace Themesong White Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Tiptop Feathertop Iceberg Madonna Illini Igloo Shasta Stardust Illini Snowdrift Viscount	Popcorn White Popcorn Crystallite Keepsake Pinocchio Vesta Memento Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Yellow Betsy Ross Yellow Marvel Golden Favourite	Yellow Marblehead Luyona Yellow Lace Good News Yellow Ivanhoe Mecca	Blazing Gold Butterball
	P Yellowtop Mary Hall Crescendo Yel. Beauregard Yel. Iceberg Sunfire Luxury Yellow Shasta Yellow Igloo Yel. Illini Snowdrift	Starlight Golden Herald Happiness Sunup Sauterne Gondola Dandy Brilliance Statesman Honeymoon	Topflight Yellow Silvertone
BRONZE & RED	S	Fred Yule Mrs. Palmero Bronze Palmero	
	P Beauregard Butterscotch Wizard	Resolute Paxon Sybil	
PINK	S Laughter Vanguard	Bunbu	
	P Profile Pennant Cheerful	Pinkette Bluechip Reward Tempo	Mirth

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Year-Round Chrysanthemum Flowering Schedule

BLOOM AUGUST 24, 1959

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
25-50°	May 4	May 25	June 15 June 22 June 29	10 Week 9 Week 8 Week

BLOOM AUGUST 31, 1959

25-50°	May 11	June 1	June 22 June 29 July 6	10 Week 9 Week 8 Week
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BLOOM SEPTEMBER 7, 1959

25-50°	May 18	June 8	June 29 July 6 July 13	10 Week 9 Week 8 Week
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*For No Pinch Method: Plant on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross Sentinel Whirlwind	Marblehead Queen's Lace Themesong White Mary Garden	Wh. Pink Chief Silver Sheen
	P Ping Pong Whitetop Supreme Whitetop Iceberg Madonna Illini Igloo Shasta Stardust Viscount Illini Snowdrift	Popcorn White Popcorn Crystallite White Keepsake Pinocchio Songster Vesta Memento Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Yellow Betsy Ross Yellow Marvel Golden Favourite Explorer	Luyona Yellow Lace Good News Mecca	Blazing Gold Butterball
	P Goldtop Crescendo Yel. Beauregard Golden Bantam Goldberg Sunfire Yellow Shasta Yellow Igloo Heyday Yel. Illini Snowdrift	Starlight Golden Herald Happiness Sunup Sauterne Gondola Dandy Brilliance Statesman Honeymoon	Topflight Yellow Silvertone
BRONZE & RED	S Nomago	Mrs. Palmero Bronze Palmero Fred Yule	
	P Dillion Beauregard Butterscotch Wizard	Resolute Paxon Sybil Bronzechip	
PINK	S Vanguard Laughter	Bunbu	
	P Profile Pennant	Pinkette Reward Bluechip Gail Tempo	Mirth

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P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM SEPTEMBER 14, 1959

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
25-50°	May 25	June 15	July 6 July 13 July 20	10 Week 9 Week 8 Week

BLOOM SEPTEMBER 21, 1959

25-50°	June 1	June 22	July 6 July 13 July 20	11 Week 10 Week 9 Week
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BLOOM SEPTEMBER 28, 1959

25-50°	June 1	June 22	July 13 July 20 July 27	11 Week 10 Week 9 Week
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*For No Pinch Method: Plant on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	S	Imp. Ind. White Ind. No. 3 White Giant Betsy Ross Melo	Silver Queen Thomesong Albatross Queen's Lace	Wh. Pink Chief Silver Sheen
	P	White Taffeta Sculpture Ermine Jupiter Highbrow Paramount	Ping Pong Whitetop Supreme Whitetop Iceberg Madonna Illini Igloo Shasta Stardust Viscount Illini Snowdrift	Popcorn White Popcorn Crystallite White Keepsake Pinocchio Songster Vesla Memento Alaska Thistledown
YELLOW	S	Imp. Ind. Yellow Explorer Yellow Marvel Cream Melo	Luyona Mecca Gold Lace Good News	Blazing Gold Butterball
	P	Souvenir Yellow Taffeta Yel. Sculpture Golden Chord Esquire Forty Niner Gold Ball Illini Goldilocks Shane Etude Yellow Highbrow Lollipop Pippin Klondike Illini Sunspot Sultan Golden Paramount	Goldtop Aztec Crescendo Golden Bantam Yel. Beauregard Goldberg Sunfire Luxury Yellow Shasta Jealousy Heyday Yellow Igloo Yel. Pacesetter Yel. Ill. Snowdrift Fanfare	Goldfinch Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Yellow Halo Dandy Statesman Brilliance Honeymoon
BRONZE & RED	S	Mrs. Eisenhower Beacon	Ind. Bronze Nomago Copper Queen Mrs. Roy	Mrs. Palmero Bronze Palmero Detroit News Fred Yule
	P	Beauregard Sup. Thelma Ranger Olnura Bronze Minuet Rubaiyat	Jeffire Beauregard Rubicon Nectarine Samovar Wizard Climax Bronze Pandora Giltglow	Resolute Gaiety Paxon Bronze Dot Buckskin Wagonwheels Sybil Peachchip Red Daisy
PINK	S	Ind. Pink Vanguard Dk. Orchid Queen Laughter	Bunbu Mary Garden	Pink Chief
	P	Taffeta Jubilation Illini Springtime Almega Minuet Blue Skies Illini Formal	Pinkette Rose Gaiety Reward Pink Dot Bluechip Darkchip Handsome Tempo	Accolade Miri

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P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM OCTOBER 5, 1959

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
40-50°	June 8	June 29	July 20	11 Week
			July 27	10 Week
			Aug. 3	9 Week
25-40°	June 15	July 6	July 20	11 Week
			July 27	10 Week
			Aug. 3	9 Week

BLOOM OCTOBER 12, 1959

40-50°	June 15	July 6	July 27	11 Week
			Aug. 3	10 Week
			Aug. 10	9 Week
25-40°	June 22	July 13	July 27	11 Week
			Aug. 3	10 Week
			Aug. 10	9 Week

*For No Pinch Method: Plant on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week
WHITE	S	Imp. Ind. White Ind. No. 3 White Giant Betsy Ross Mefo	Silver Queen Themesong Albatross Queen's Lace Marblehead
	P	Ping Pong Whitop Supreme Whitop Madonna Illini Igloo Chalk Cliff Shasta Stardust Viscount Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Vesta Memento Alaska Thistledown Halo
YELLOW	S	Imp. Ind. Yellow Explorer Yellow Marvel Yellow Queen Cream Mefo	Luyona Mecca Gold Lace Good News
	P	Souvenir Yellow Taffeta Yel. Sculpture Golden Chord Esquire Forty Niner Gold Ball Shane Etude Yellow Highbrow Lollipop Klondike Illini Sunspot Sultan Golden Paramount	Goldfinch Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Yellow Halo Dandy Statesman Brilliance Starbright Honeymoon
BRONZE & RED	S	Mrs. Eisenhower Valentine Beacon	Mrs. Palmero Bronze Palmero Detroit News Fred Yule
	P	Beauregard Supr. Br. Jubilation Thelma Ranger Ambercon Illini War Paint Olnura Bronze Minuet Rubaiyat	Resolute Gaiety Paxon Bronze Dot Buckskin Wagonwheels Sybil Peachchip Red Daisy
PINK	S	Ind. Pink Vanguard Dk. Orchid Queen Laughter	Bunbu Mary Garden
	P	Taffeta Jubilation Illini Springtime Almega Minuet Blue Skies Illini Formal	Pinkette Rose Gaiety Reward Pink Dot Bluechip Darkchip Handsome Tempo

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P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM OCTOBER 19, 1959

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
40-50°	June 15	July 6	Aug. 3 Aug. 10 Aug. 17	11 Week 10 Week 9 Week
25-40°	June 29	July 20	Aug. 3 Aug. 10 Aug. 17	11 Week 10 Week 9 Week

BLOOM OCTOBER 26, 1959

40-50°	June 22	July 13	Aug. 10 Aug. 17 no	11 Week 10 Week 9 Week
25-40°	July 6	July 27	Aug. 10 Aug. 17 no	11 Week 10 Week 9 Week

*For No Pinch Method: Plant on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week
WHITE	S	Imp. Ind. White Ind. No. 3 White Giant Betsy Ross Mefo Fred Shoesmith	Silver Queen Themasong Albatross Queen's Lace Marblehead
	P	White Taffeta Sculpture Ermine Jupiter Highbrow Paramount Belray	White Popcorn Crystallite White Keepsake Pinocchio Vesta Memento Alaska Thistle-down Halo
YELLOW	S	Harvester	Luyona Mecca Gold Lace Good News
	P	Souvenir Yellow Taffeta Yellow Sculpture Golden Chord Esquire Forty Niner Gold Ball Shane Etude Yellow Highbrow Lollipop Klondike Illini Sunspot Sultan Golden Paramount	Goldfinch Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Yellow Halo Dandy Statesman Brilliance Starbright Honeymoon
BRONZE & RED	S	Mrs. Eisenhower Valentine Beacon	Mrs. Palmero Bronze Palmero Detroit News Fred Yule
	P	Beauregard Supr. Bronze Jubilation Thelma Ranger Ambercon Illini War Paint Olnura Bronze Minuet Rubaiyat	Resolute Gaiety Paxon Bronze Dot Buckskin Wagonwheels Sybil Peachchip Red Daisy
PINK	S	Ind. Pink Vanguard Dark Orchid Queen Laughter Pink F. Shoesmith	Bunbu Mary Garden
	P	Taffeta Jubilation Illini Springtime Almega Minuet Blue Skies Illini Formal	Pinkette Rose Gaiety Reward Pink Dot Bluechip Darkchip Handsome Tempo

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM MAY 18, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Jan. 5	Feb. 2	Jan. 5 —Mar. 9	Mar. 23	10 Week
			Jan. 5 —Mar. 16	Mar. 30	9 Week
			Jan. 5 —Mar. 23	Apr. 6	8 Week
35-40°	Jan. 12	Feb. 9	Jan. 12—Mar. 9	Mar. 23	10 Week
			Jan. 12—Mar. 16	Mar. 30	9 Week
			Jan. 12—Mar. 23	Apr. 6	8 Week
25-35°	Jan. 26	Feb. 16	Jan. 26—Mar. 9	Mar. 23	10 Week
			Jan. 26—Mar. 16	Mar. 30	9 Week
			Jan. 26—Mar. 23	Apr. 6	8 Week

BLOOM MAY 25, 1959

40-50°	Jan. 19	Feb. 16	Jan. 19—Mar. 16	Mar. 23	10 Week
			Jan. 19—Mar. 23	Mar. 28	9 Week
			Jan. 19—Mar. 30	Apr. 6	8 Week
25-40°	Feb. 2	Feb. 23	Feb. 2 —Mar. 16	Mar. 23	10 Week
			Feb. 2 —Mar. 23	Mar. 28	9 Week
			Feb. 2 —Mar. 30	Apr. 6	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Imp. Ind. White Crystal Queen Mefo Fred Shoemith	Queen's Lace Marblehead Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P Whitetop Iceberg Chalk Cliff Pacesetter Illini Igloo Shasta Stardust Illini Snowdrift	White Popcorn Crystallite White Keepsake Pinocchio Memento Halo Alaska Thistledown	Echo Blizzard Pristine Silvertone
YELLOW	S Imp. Ind. Yellow Yellow Queen Yellow Mefo Cream Mefo Yellow Shoes'th	Luyona Gold Lace Yellow Lace Yel. Marblehead	Blazing Gold Butterball
	P Yellowtop Aztec Mary Hall Yel. Beauregard Yel. Iceberg Sunfire Yellow Shasta Yellow Igloo Heyday Yel. Ill. Snowdrift Fanfare	Starlight Golden Herald Gold Coast Happiness Sunup Sauterne Gondola Dandy Statesman Brilliancy Honeymoon	Yellow Calumet Topflight
BRONZE & RED	S Dk. Ind. Bronze Nomago Copper Queen		
	P Nectarine Beauregard Giltglow Climax Amberhue	Resolute Gaiety Sybil Peachchip Wagonwheels	Calumet Dark Calumet Red Enterprise Talisman Paradise
PINK	S Ind. Pink Dk. Orc'd Queen	Bunbu Mary Garden	
	P Delight Portrait Bonnie Pennant Linda Lou	Pinkette Vogue Bluechip Handsome Tempo	Mayfair Enterprise Mirth

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 9, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	June 29	July 20	None	Aug. 17	12 Week
			None	Aug. 24	11 Week
			Aug. 3 —Aug. 31	Aug. 31	10 Week
30-40°	July 6	July 27	None	Aug. 17	12 Week
			None	Aug. 24	11 Week
			Aug. 3 —Aug. 31	Aug. 31	10 Week
25-35°	July 13	Aug. 3	None	Aug. 17	12 Week
			None	Aug. 24	11 Week
			Aug. 4 —Aug. 31	Aug. 31	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week
WHITE	S White Peter John Chattanooga	Marketeer	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith
	P White Princess Silvercrest Illini Peace Champ Fortune Illini Glacier	White Taffeta Sculpture Ermine Jupiter Highbrow Surfside Paramount Belray Carrara	Ping Pong Supreme Whitetop Illini Igloo Chalk Cliff Shasta Stardust Viscount Illini Snowdrift Little America
YELLOW	S Yellow Peter John	Lorraine Harvester	Imp. Ind. Yellow Explorer Yellow Marvel Yellow Queen Cream Melo Golden Shoesmith
	P Goldsmith Highlander Illini Wampum Yellow Fortune Omega Yellow Galaxy	Souvenir Yellow Sculpture Golden Chord Esquire Forty Niner Gold Ball Shane Etude Yellow Highbrow Lollipop Klondike Illini Sunspot Sultan Golden Paramount	Goldtop Aztec Golden Bantam Yellow Beauregard Goldberg Sunfire Luxury Yellow Shasta Jealousy Heyday Yellow Igloo Yellow Pacesetter Yel. Ill. Snowdrift Fanfare
BRONZE & RED	S Bronze Peter John	Balcombe Perfection Calvert's Gold Valentine Beacon	Ind. Bronze Nomago Copper Queen Mrs. Roy
	P Illini Redwood Bronze Goldsmith Galaxy Crackerjack Red Empress	Beauregard Supr. Bronze Jubilation Thelma Ranger Ambercon Illini War Paint Olnura Bronze Minuet Rubaiyat	Jeffire Beauregard Rubicon Nectarine Samovar Wizard Climax Bronze Pandora Giltglow
PINK	S Pink Peter John Dk. Pink Peter John	Aristocrat Calvert's Pink Rose Delight Thanks. Pink	Ind. Pink Vanguard Orchid Queen Laughter Pink F. Shoesmith
	P Legend Delmar Illini Roseglow	Taffeta Jubilation Illini Springtime Almega Minuet Blue Skies Illini Formal Celebrity	Parisienne Delight Portrait Profile Bonnie Pennant Linda Lou Cheerful

Year-Round Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 16, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	July 6	July 27	None	Aug. 17	13 Week
			None	Aug. 24	12 Week
			None	Aug. 31	11 Week
			Aug. 3 —Sept. 7	No	10 Week
30-40°	July 13	Aug. 3	None	Aug. 17	13 Week
			None	Aug. 24	12 Week
			None	Aug. 31	11 Week
			Aug. 3 —Sept. 7	No	10 Week
25-30°	July 20	Aug. 10	None	Aug. 24	12 Week
			None	Aug. 31	11 Week
			Aug. 3 —Sept. 7	No	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga White Peter John	Marketeer Indiana Market	Imp. Ind. White Ind. No. 3 White Crystal Queen Melo Fred Shoesmith
	P	Icecap Acclaim Illini Alba Satellite Dolomite	Sculpture Jupiter Highbrow Paramount Belray	Whitetop Iceberg Shasta Stardust Little America
YELLOW	S	Dk. Yel. Chat'n'ga Golden Pearson Yellow Peter John	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yellow Explorer Yellow Queen Cream Melo Golden Shoesmith
	P	Coronation Golden Acclaim Spungold Dk. Yel. Satellite Corsair	Esquire Forty Niner Etude Shane Yel. Highbrow Golden Param't	Goldtop Yel. Beauregard Goldberg Yel. Shasta Yellow Igloo Heyday
BRONZE & RED	S	Bronze Peter John Oak Leaf	Balcombe Perfect. Calvert's Gold Valentine Beacon	Ind. Bronze Nomago Copper Queen Mrs. Roy
	P	Christmas Star Apricot Minstrel Flame Minstrel	Thelma Ranger Rusticon Bronze Minuet Rubaiyat	Beauregard Jettire Wizard Bronze Portrait Climax
PINK	S	Pink Peter John Dk. Pk. Peter John	Aristocrat Calvert's Pink Rose Delight Thanks. Pink	Ind. Pink Vanguard Orchid Queen Pink F. Shoesmith
	P	Eminence Debutante Minstrel Prom	Staccato Grand Slam Jubilation Blue Skies	Delight Portrait Pennant Cheerful

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 23, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	July 13	Aug. 3	None	Aug. 24	13 Week
			None	Aug. 31	12 Week
			Aug. 10—Sept. 7	No	11 Week
			Aug. 3—Sept. 14	No	10 Week
30-40°	July 20	Aug. 10	None	Aug. 24	13 Week
			None	Aug. 31	12 Week
			Aug. 10—Sept. 7	No	11 Week
			Aug. 3—Sept. 14	No	10 Week
25-30°	July 27	Aug. 17	None	Aug. 31	12 Week
			Aug. 10—Sept. 7	No	11 Week
			Aug. 4—Sept. 14	No	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga White Peter John	Marketeer Indiana Market	Imp. Ind. White Ind. No. 3 White Crystal Queen Mafu Fred Shoesmith
	P	Icecap Acclaim Illini Alba Satellite Delomite	Sculpture Jupiter Highbrow Paramount Belray	Whitetop Iceberg Shasta Stardust Little America
YELLOW	S	Dk. Yel. Chaf'n'ga Golden Pearson Yellow Peter John	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yellow Explorer Yellow Queen Cream Mefo Golden Shoesmith
	P	Coronation Golden Acclaim Spungold Dk. Yel. Satellite Corsair	Esquire Forty Niner Etude Shane Yel. Highbrow Gol. Paramount	Goldtop Yel. Beauregard Goldberg Yellow Shasta Yellow Igloo Heyday
BRONZE & RED	S	Br. Peter John Oak Leaf	Balcombe Perfect. Calvert's Gold Valentine Beacon	Ind. Bronze Nomago Copper Queen Mrs. Roy
	P	Christmas Star Apricot Minstrel Flame Minstrel	Thelma Ranger Rusticon Bronze Minuet Rubaiyat	Beauregard Jeffire Wizard Br. Portrait Climax
PINK	S	Pink Peter John Dk. Pk. Peter John	Aristocrat Calvert's Pink Rose Delight Thanks. Pink	Ind. Pink Vanguard Orchid Queen Pink F. Shoes'th
	P	Eminence Debutante Minstrel Prom	Staccato Grand Slam Jubilation Blue Skies	Delight Portrait Pennant Cheerful

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 30, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	July 20	Aug. 10	None	Aug. 24	14 Week
			None	Aug. 31	13 Week
			Aug. 17—Sept. 7	No	12 Week
			Aug. 10—Sept. 14	No	11 Week
			Aug. 3—Sept. 21	No	10 Week
30-40°	July 27	Aug. 17	None	Aug. 24	14 Week
			None	Aug. 31	13 Week
			Aug. 17—Sept. 7	No	12 Week
			Aug. 10—Sept. 14	No	11 Week
			Aug. 3—Sept. 21	No	10 Week
25-30°	Aug. 3	Aug. 24	Aug. 17—Sept. 7	No	12 Week
			Aug. 10—Sept. 14	No	11 Week
			Aug. 3—Sept. 21	No	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Smith's White Dec. White	Chaffanooga December Glory Marg'et Moeller	Marketeer	Ind. No. 3 Wh. Crystal Queen Mefo Fred Shoemsmith
	P	Trenton Silversmith Snowcap White Riviera Elegance	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Sculpture Jupiter Highbrow Paramount Belray Carrara	Whitetop Iceberg Shasta Stardust Little America Illini Snowdrift
YELLOW	S	Tobin's Yellow Meteore Dauntless	Dk. Yel. Chat'n'ga Gol. Mrs. Rose Golden Moeller	Friendly Rival Harvester Marie DePetrus	Imp. Ind. Yellow Explorer Cream Mefo Golden Shoemsmith
	P	Ill. Brighteyes Yellow Riviera Shamrock Gold. Elegance Sun Valley Vibrant	Coronation Gold. Acclaim Spungold Dk. Yel. Satellife Corsair Yel. Snowcrest	Highlander Yel. Valencia Illini Wampum Yellow Fortune Omega Yellow Galaxy	Esquire Forty Niner Shane Ill. Goldrift Yel. Highbrow Gol. Param'nt
BRONZE & RED	S		Gladys Pearson Oak Leaf	Balcombe Perf. Calvert's Gold	Ind. Bronze Copper Queen
	P	Bronze Alvoda Topaz Christ. Greet'gs Ill. Homespun Poinsettia	Debonair Christmas Star Harlequin Ap'cot Minstrel Flame Minstrel	Br. Jubilation Valentine Ill. War Paint Olnura Rubaiyat	Jetfire Beauregard Wizard Bronze Portrait Climax
PINK	S		Pink Mistletoe Pink Peter John Dk. Pk. Peter John	Calvert's Pink Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen Pk. F. Sho'sm'th
	P	Alvoda Riviera Rosalind Defiance	Eminence Debutante Minstrel Prom	Legend Delmar Valencia Empress	Magic Jubilation Almega Blue Skies

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM DECEMBER 7, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	July 20	Aug. 10	None	Aug. 24	14 Week
			None	No	13 Week
			Aug. 17—Sept. 14	No	12 Week
			Aug. 10—Sept. 21	No	11 Week
			Aug. 3 —Sept. 28	No	10 Week
30-40°	July 27	Aug. 17	None	Aug. 24	14 Week
			None	No	13 Week
			Aug. 17—Sept. 14	No	12 Week
			Aug. 10—Sept. 21	No	11 Week
			Aug. 3 —Sept. 28	No	10 Week
25-30°	Aug. 10	Aug. 31	Aug. 17—Sept. 14	No	12 Week
			Aug. 10—Sept. 21	No	11 Week
			Aug. 3 —Sept. 28	No	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Smith's White Dec. White	Chattanooga Dec. Glory Marg'et Moeller	Marketeer	Ind. No. 3 Wh. Crystal Queen Mefo Fred Shoesmith
	P	Trenton Silversmith Snowcap White Riviera Elegance	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Sculpture Jupiter Highbrow Paramount Belray Carrara	Whitetop Iceberg Shasta Stardust Little America Illini Snowdrift
YELLOW	S	Tobin's Yellow Meteore Dauntless	Dk. Yel. Chat'n'ga Gold. Mrs. Rose Golden Moeller	Friendly Rival Harvester Marie DePetrus	Imp. Ind. Yel. Explorer Cream Mefo Gol. Shoesmith
	P	Ill. Brighteyes Yellow Riviera Shamrock Gol. Elegance Sun Valley Vibrant	Coronation Gold. Acclaim Spungold Dk. Yel. Sat. Corsair Yel. Snowcrest	Esquire Forty Niner Shane Ill. Goldrift Yellow Highbrow Gold. Param'nt	Goldtop Yel. Beauregard Goldberg Yel. Shasta Yellow Igloo Heyday
BRONZE & RED	S		Gladys Pearson Oak Leaf	Balcombe Perf. Calvert's Gold	Ind. Bronze Copper Queen
	P	Bronze Alvoda Topaz Christ. Greet'gs Ill. Homespun Poinsettia	Debonair Christmas Star Harlequin Ap'cot Minst'l Flame Minstrel	Br. Jubilation Valentine Ill. War Paint Olnura Rubaiyat	Jetfire Beauregard Wizard Bronze Portrait Climax
PINK	S	Pink Mistletoe	Pk. Peter John Dk. Pk. Peter John	Calvert's Pink Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen Pk. F. Sho'sm'th
	P	Alvoda Riviera Rosalind Defiance	Legend Delmar Valencia Empress	Magic Jubilation Almega Blue Skies	Delight Profile Cheerful

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM DECEMBER 14, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	July 27	Aug. 17	None	No	14 Week
			Aug. 24—Sept. 14	No	13 Week
			Aug. 17—Sept. 21	No	12 Week
			Aug. 10—Sept. 28	No	11 Week
			Aug. 3 —Oct. 5	No	10 Week
35-40°	Aug. 3	Aug. 24	None	No	14 Week
			Aug. 24—Sept. 14	No	13 Week
			Aug. 17—Sept. 21	No	12 Week
			Aug. 10—Sept. 28	No	11 Week
			Aug. 3 —Oct. 5	No	10 Week
30-35°	Aug. 10	Aug. 31	None	No	14 Week
			Aug. 24—Sept. 14	No	13 Week
			Aug. 17—Sept. 21	No	12 Week
			Aug. 10—Sept. 28	No	11 Week
			Aug. 3 —Oct. 5	No	10 Week
25-30°	Aug. 17	Sept. 7	Aug. 17—Sept. 21	No	12 Week
			Aug. 10—Sept. 28	No	11 Week
			Aug. 3 —Oct. 5	No	10 Week
				No	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Smith's White Dec. White	Chaffanooga Dec. Glory Marg'et Moeller	Marketeer	Ind. No. 3 Wh. Crystal Queen Mefo Fred Shoesmith
	P	Trenton Silversmith Snowcap White Riviera Elegance	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Sculpture Jupiter Highbrow Paramount Belray Carrara	Whitetop Iceberg Shasta Stardust Little America Illini Snowdrift
YELLOW	S	Tobin's Yellow Meteore Dauntless	Dk. Yel. Chat'n'ga Gold. Mrs. Rose Golden Moeller	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yel. Explorer Cream Mefo Gol. Shoesmith
	P	Ill. Brighteyes Yel. Riviera Shamrock Gol. Elegance Sun Valley Vibrant	Coronation Gold. Acclaim Spungold Dk. Yel. Satel. Corsair Yel. Snowcrest	Highlander Yel. Valencia Illini Wampum Yellow Fortune Omega Yellow Galaxy	Esquire Forty Niner Shane Ill. Goldrift Yellow Highbrow Gol. Param'nt
BRONZE & RED	S		Gladys Pearson Oak Leaf	Balcombe Perf. Calvert's Gold	Ind. Bronze Copper Queen
	P	Bronze Alvoda Topaz Christ. Greet'gs Ill. Homespun Poinsettia	Debonair Christ. Star Harlequin Ap'cot Minstrel Flame Minstrel	Br. Jubilation Valentine Ill. War Paint Olnura Rubalyat	Jetfire Beauregard Wizard Bronze Portrait Climax
PINK	S		Pink Peter John Dk. Pk. Peter John	Calvert's Pink Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen Pk. F. Sho'sm'th
	P	Alvoda Riviera Rosalind Defiance	Eminence Debutante Minstrel Prom	Legend Delmar Valencia Empress	Magic Jubilation Almega Blue Skies

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM DECEMBER 21, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 3	Aug. 24	None	no	15 Week
			Aug. 31—Sept. 14	no	14 Week
			Aug. 24—Sept. 21	no	13 Week
			Aug. 17—Sept. 28	no	12 Week
			Aug. 10—Oct. 5	no	11 Week
			Aug. 4—Oct. 12	no	10 Week
35-40°	Aug. 17	Sept. 7	None	no	15 Week
			Aug. 31—Sept. 14	no	14 Week
			Aug. 24—Sept. 21	no	13 Week
			Aug. 17—Sept. 28	no	12 Week
			Aug. 17—Oct. 5	no	11 Week
			Aug. 17—Oct. 12	no	10 Week
30-35°	Aug. 24	Sept. 14	Aug. 24—Sept. 21	no	13 Week
			Aug. 24—Sept. 28	no	12 Week
			Aug. 24—Oct. 5	no	11 Week
			Aug. 24—Oct. 12	no	10 Week
25-30°	Aug. 24	Sept. 14	Aug. 24—Sept. 28	no	12 Week
			Aug. 24—Oct. 5	no	11 Week
			Aug. 24—Oct. 12	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	15 Week	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Smith's White Dec. White	Chattanooga December Glory Marg'et Moeller	Marketeer	Ind. No. 3 Wh. Crystal Queen Mefo Fred Shoesmith
	P	Revelation Snow Talmeda Ill. Cascade	Trenton Silversmith Snowcap White Riviera Elegance	Icecap Acclaim Illini Alba Satellite Dolomite Snowcrest	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Sculpture Jupiter Highbrow Paramount Belray Carrara
YELLOW	S		Tobin's Yellow Meteore Dauntless	Dk. Yel. Chat'n'ga Gol. Mrs. Rose Golden Moeller	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yel. Explorer Cream Mefo Gol. Shoesmith
	P	Siren Yuleflame Yel. Snow	Ill. Brighteyes Yellow Riviera Shamrock Gol. Elegance Sun Valley Vibrant	Coronation Gold. Acclaim Spungold Dk. Yel. Satel. Corsair Yel. Snowcrest	Highlander Yel. Valencia Illini Wampum Yellow Fortune Omega Yellow Galaxy	Esquire Forty Niner Shane Ill. Goldrift Yel. Highbow Gol. Param'nt
BRONZE & RED	S			Gladys Pearson Oak Leaf	Balcombe Perf. Calvert's Gold	Ind. Bronze Copper Queen
	P		Bronze Alvoda Topaz Christ. Greet'gs Ill. Homespun Poinsettia	Debonair Christmas Star Harlequin Ap'cot Minstrel Flame Minstrel	Ap'cot Valencia Galaxy Holiday Crackerjack Red Empress	Br. Jubilation Valentine Ill. War Paint Olnura Rubaiyat
PINK	S		Pink Mistletoe	Pink Peter John Dk. Pk. Pet. John	Calvert's Pink Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen Pk. F. Sho'sm'th
	P		Alvoda Riviera Rosalind Defiance	Eminence Debutante Minstrel Prom	Legend Delmar Valencia Empress	Magic Jubilation Almega Blue Skies

S—Standard

P—Pompon

Year-Round Chrysanthemum Flowering Schedule

BLOOM DECEMBER 28, 1959

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40-50°	Aug. 10	Aug. 31	None	no	15 Week
			Aug. 31—Sept. 21	no	14 Week
			Aug. 24—Sept. 28	no	13 Week
			Aug. 17—Oct. 5	no	12 Week
			Aug. 10—Oct. 12	no	11 Week
			Aug. 10—Oct. 19	no	10 Week
35-40°	Aug. 17	Sept. 7	None	no	15 Week
			Aug. 31—Sept. 21	no	14 Week
			Aug. 24—Sept. 28	no	13 Week
			Aug. 17—Oct. 5	no	12 Week
			Aug. 17—Oct. 12	no	11 Week
			Aug. 17—Oct. 19	no	10 Week
30-35°	Aug. 24	Sept. 14	Aug. 24—Sept. 28	no	13 Week
			Aug. 24—Oct. 5	no	12 Week
			Aug. 24—Oct. 12	no	11 Week
			Aug. 24—Oct. 19	no	10 Week
25-30°	Aug. 31	Sept. 21	Aug. 31—Oct. 5	no	12 Week
			Aug. 31—Oct. 12	no	11 Week
			Aug. 31—Oct. 19	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	15 Week	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Smith's White Dec. White	Chattanooga December Glory Marg'et Moeller	Marketeer	Ind. No. 3 Wh. Crystal Queen Mefo Fred Shoesmith
	P	Revelation Snow Talmeda Ill. Cascade	Trenton Silversmith Snowcap White Riviera Elegance	Icecap Acclaim Illini Alba Satellite Dolomite Snowcrest	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Sculpture Jupiter Highbrow Paramount Belray Carrara
YELLOW	S		Tobin's Yellow Meteore Dauntless	Dk. Yel. Chat'n'ga Gol. Mrs. Rose Golden Moeller	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yel. Explorer Cream Mefo Gol. Shoesmith
	P	Siren Yuleflame Yel. Snow	Ill. Brighteyes Yellow Riviera Shamrock Gol. Elegance Sun Valley Vibrant	Coronation Gold. Acclaim Spungold Dk. Yel. Satel. Corsair Yel. Snowcrest	Highlander Yel. Valencia Illini Wampum Yellow Fortune Omega Yellow Galaxy	Esquire Forty Niner Shane Ill. Goldrift Yel. Highbrow Gol. Param'nt
BRONZE & RED	S			Gladys Pearson Oak Leaf	Balcombe Perf. Calvert's Gold	Ind. Bronze Copper Queen
	P		Bronze Alvoda Topaz Christ. Greef'gs Ill. Homespun Poinsettia	Debonair Christmas Star Harlequin Ap'cot Minstrel Flame Minstrel	Ap'cot Valencia Galaxy Holiday Crackerjack Red Empress	Br. Jubilation Valentine Ill. War Paint Olnura Rubaiyat
PINK	S		Pink Mistletoe	Pink Peter John Dk. Pk. Pet. John	Calvert's Pink Thanks. Pink Ed Seidewitz	Ind. Pink Orchid Queen Pk. F. Sho'sm'th
	P		Alvoda Riviera Rosalind Defiance	Eminence Debutante Minstrel Prom	Legend Delmar Valencia Empress	Magic Jubilation Almega Blue Skies

Chrysanthemum Pot Plant Culture



Mermaid

High quality pot plants can only be grown when all cultural conditions are optimum. By optimum conditions we refer particularly to the basic conditions of a good soil, disease-free cuttings, the absence of any checks in growth from cutting to the mature flowering plant, adequate means of temperature control and the selection of the right varieties.

Soil

A good fibrous silt loam directly from the field, to which one-third to one-half of well-rotted manure or German peat has been added, plus an application of super-phosphate will give excellent results. Steam sterilization of the soil is advisable. You can plant immediately after steaming, provided you water heavily after planting the cuttings. Some growers are getting extra quick root action by using a top dressing of one-half inch of German peat over their regular soil mixture in each pot and planting through this mulch of peat. It saves on watering and produces more breaks after pinching.

Watering and Humidity

After planting, water thoroughly to set the soil around the roots. Repeat this type of watering when the soil gets dry. Organic matter in the soil will facilitate watering and will tend to avoid extreme fluctuations in moisture supply. You can overwater a chrysanthemum as easily as a poinsettia plant. Overwatering will rot the roots, and the tops will take on a very yellow color.

For best results grow all potted chrysanthemums under glass. Do not shade the glass any more than necessary. Usually a light shade is necessary in mid-summer. Shade on the glass is only there for the convenience of the grower and not for the requirements of the plant. Keep humidity in the house by wetting down benches and walks, and by an occasional syringing over the plants.

Fertilizing

The foliage should retain a bright green luster throughout the life of the plant. The lower leaves should never

be allowed to turn a light green due to low fertility. A strong well-grown pot plant is a well-fed plant. Pot plants should be fed more frequently than those grown in a bench, as constant leaching lowers the nutrient level in pots faster than in bench culture.

Liquid fertilizers are very effective. Weekly feedings have produced excellent results. After the cuttings are planted, water the plants in with a weak solution (starter solution) of a complete soluble fertilizer and continue to feed weekly thereafter. Last feeding should be made when the plants are ready to sell. Maintain continuous and accurate feedings during the winter as well as during the remainder of the year. During the winter months cut the fertilizer concentration to 1 ounce to 8 gallons of water.

Feeding everytime you water with a Fert-O-Ject has proven to be very reliable method of fertilizing. Tests at Ohio State University confirmed this. They had the best results when plants were fertilized (1 oz. to 15 gallons) each time they were watered.

Temperature

The optimum night temperature is 65 degrees. Day temperatures should be 75 to 85 degrees when the light intensity is high and 70 degrees during cloudy days. Heat checks develop when the night temperatures reach 90 degrees or higher. This check is very similar to the check that develops when plants are taken out of short-day treatment too early or when the black cloth treatment is missed too often. The only practical way to overcome this heat check is to install air conditioning to lower the temperatures. Growing the crop at less than a 65 degree night temperature results in uneven and delayed flowering. A gradual temperature drop to 55 degrees after buds show color is advisable for some pink and bronze varieties.

Shading and Disbudding

Use same procedure as for cut flower crop. Black cloth treatment should continue until the buds are taken. The last pinch is usually made the same day short-day treatment is started. However, if you are troubled with tall potted plants, delay the last pinch 10 to 14 days after starting the shading program. Disbud each shoot to one bud when buds are large enough to handle.



Red Star

Chrysanthemum Pot Plant Culture

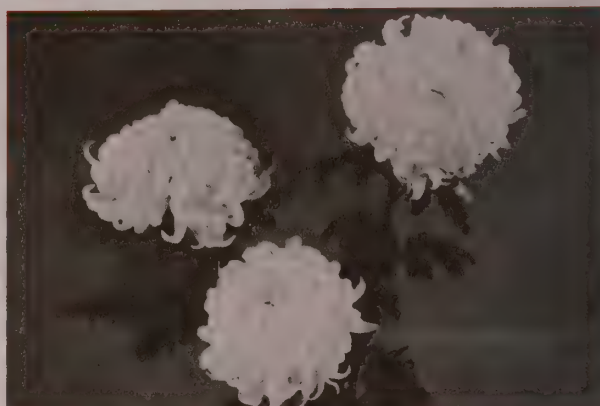
Planting and Pinching

Plant the rooted cuttings which have been graded for height and stem diameter directly into the finishing pot. Rhizoctonia will develop in the stem when the cuttings are planted too deeply. It is better to plant the cuttings around the pot rather than the four with one in the center practice. Planting the cuttings on an angle will increase the number of breaks that develop after the pinch.

Single Stem Method (No-Pinch Method). Plant 7 to 8 cuttings in a 6-inch pot and give short day treatment immediately. Do not pinch. You save from one to three weeks growing time over the pinch method. Disbud to a single bloom per plant. The blooms will be very large and the stems will be much stronger than when growing pinched plants. For larger pots plant 10 cuttings in 8-inch pots. Some new varieties that should be grown as single stem are: Malou, Mrs. Wolfe, Mrs. Palmero, Bronze Palmero, Loubens, Cossack, Red Star, Vulcan and Woking Scarlet.

Single-Pinch Method. The most practical method of growing potted plants today. It is much faster and produces a very uniform plant with strong stems. Plant 5 cuttings of Bonnaffon Deluxe or 6 cuttings of the other varieties in a 6-inch pot. Pinch the plants high in the soft growth according to the schedule found in the year-round program.

The term short, medium and tall treatment refers to the height of the plants and different treatments are given so as to make all varieties about the same height when ready to sell. Wilson's White is given the short treatment by giving the plant 7 to 14 long days after the pinch before starting the short day treatment. With varieties like Bonnaffon Deluxe we give them the medium treatment, that is short days, the day we pinch. The tall treatment includes varieties

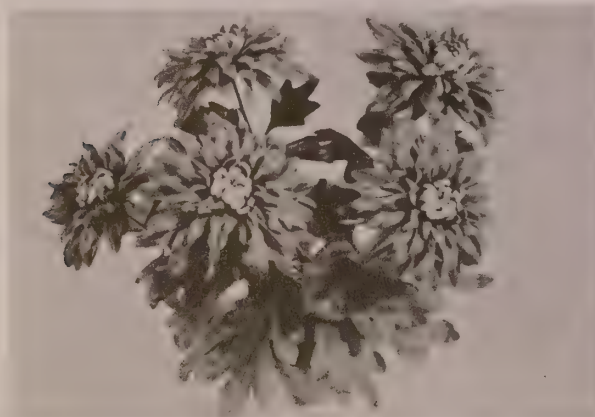


Mrs. Wolfe Single Stem Method

such as Little America and Sunburst which receive 7 to 14 short days before pinching. Our year-round schedule takes this into consideration so that your plants should finish all about the same height.

Two-Pinch Method. The most common method a few years ago and still used some for Fall bloom, especially where larger plants are wanted. Plant 4 or 5 cuttings in 6-inch pots; 4 to 6 cuttings in 7-inch, and 7 to 9 cuttings in 8-inch pots. Pinch the plants the first time 14 days after planting and wait 21 days and pinch the second time. Long-day treatment should be maintained either naturally or through the use of additional light during this period. Short-day treatment should start at the time of the second pinch.

What causes tall plants? Many factors contribute to this excessive growth. 1. Crowding. 2. Growing in a cool 60 degrees. 3. Night temperatures over 90 degrees. 4. Not applying black cloth regularly each night. 5. Growing with too much shade on glass. 6. Giving too many long days before pinching, then pinching too high. 7. Variety.



Woking Scarlet



Pink Deluxe

Chrysanthemum Pot Plant Culture

Garden Mum Pot Plants for Mother's Day

Garden mum plants in full bloom make ideal potted plants for Mother's Day. This should be a valuable addition to the list of spring pot plants. For best results, 5 cuttings should be planted in a 6-inch pot or 2 cuttings in a 4-inch pot. After these pot plants are

through flowering, they should be cut back to within 3 inches of the soil level and planted into the garden. These same plants will bloom again in the fall.

Many growers have greatly increased their sale of garden chrysanthemums by having collections in bloom during the spring season. Cuttings are planted one to a 3-inch or 3½-inch pot using the procedure outlined below for Single-Pinch Method.

SINGLE — PINCH METHOD*

BLOOM	PLANT	LIGHTING PERIOD	PINCH	SHADE
EASTER (Mar. 29)	January 12	Jan. 12—Jan. 22	Jan. 22	no
MOTHER'S DAY (May 10)	March 2	Mar. 2—Mar. 9	Mar. 9	Apr. 6
MEMORIAL DAY (May 30)	March 16	Mar. 16—Mar. 23	Mar. 23	Apr. 6

* For double-pinch method plant five weeks earlier and give first pinch seven days after planting. The second pinch should be made on the pinch date given in the single-pinch method. Be sure to light from the date of planting until date of second pinch.

VARIETIES:

WHITE

Chris Columbus
Ostosa
Benora
Maestro
Larry
Gardenia
Jessamine Williams
Pilgrim

YELLOW

Yellow Chris Columbus
Moonlight
Astoria
Sunburst
Blazing Gold
Kings Ransom
Yellow Spoon

BRONZE & RED

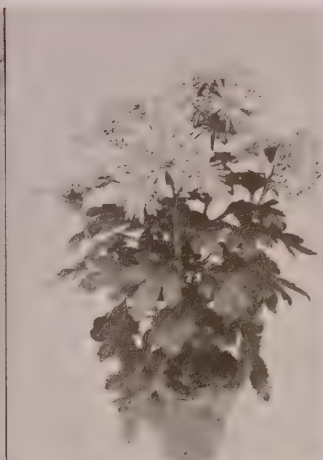
W. P. Snyder
Aglow
Mona
Dolli-Ette
Toronto
Morocco
Mrs. DuPont

PINK

Spellbound
Mischief
Joybringer
Alert
Fuchsia Fairy
Cupid
Candytuft
Raspberry Ice



Lee-Ette — 3-inch pot



Dolli-Ette — 3-inch pot

Year-Round Pot Plant Schedule

BLOOM JANUARY 4, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Oct. 5	Oct. 5 - Oct. 19	Oct. 19	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandroek..... Mermaid.....	Oct. 5	Oct. 5 - Oct. 26	Oct. 19	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Oct. 12	Oct. 12 - Oct. 19	Oct. 26	no
Chalk Cliff..... S Cossack..... S Red Star..... S Criterion..... S Personality..... S Loubens.....	Oct. 12	Oct. 12 - Oct. 26	Oct. 26	no
Queen's Lace..... Gold Lace.....	Oct. 12	Oct. 12 - Oct. 26	1st Nov. 2 2nd Nov. 30	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... S Frolic..... S Pink Deluxe.....	Oct. 19	Oct. 19 - Oct. 26	Nov. 2	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... S Bridesmaid..... Queen of Pinks.....	Oct. 19	Oct. 19 - Nov. 2	Nov. 2	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

BLOOM JANUARY 11, 1960

Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Oct. 12	Oct. 12 - Oct. 26	Oct. 26	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandroek..... Mermaid.....	Oct. 12	Oct. 12 - Nov. 2	Oct. 26	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Oct. 19	Oct. 19 - Oct. 26	Nov. 2	no
Chalk Cliff..... S Cossack..... S Red Star..... S Criterion..... S Personality..... S Loubens.....	Oct. 19	Oct. 19 - Nov. 2	Nov. 2	no
Queen's Lace..... Gold Lace.....	Oct. 19	Oct. 19 - Nov. 2	1st Nov. 9 2nd Dec. 7	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... S Frolic..... S Pink Deluxe.....	Oct. 26	Oct. 26 - Nov. 2	Nov. 9	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... S Bridesmaid..... Queen of Pinks.....	Oct. 26	Oct. 26 - Nov. 9	Nov. 9	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM JANUARY 18, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Oct. 19	Oct. 19 - Nov. 2	Nov. 2	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandrock..... Mermaid.....	Oct. 19	Oct. 19 - Nov. 9	Nov. 2	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Oct. 26	Oct. 26 - Nov. 2	Nov. 9	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... S Loubens.....	Oct. 26	Oct. 26 - Nov. 9	Nov. 9	no
Queen's Lace..... Gold Lace.....	Oct. 26	Oct. 26 - Nov. 9	1st Nov. 16 2nd Dec. 14	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Nov. 2	Nov. 2 - Nov. 9	Nov. 16	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks.....	Nov. 2	Nov. 2 - Nov. 16	Nov. 16	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

BLOOM JANUARY 25, 1960

Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Oct. 26	Oct. 26 - Nov. 9	Nov. 9	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandrock..... Mermaid.....	Oct. 26	Oct. 26 - Nov. 16	Nov. 9	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Nov. 2	Nov. 2 - Nov. 9	Nov. 16	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... S Loubens.....	Nov. 2	Nov. 2 - Nov. 16	Nov. 16	no
Queen's Lace..... Gold Lace.....	Nov. 2	Nov. 2 - Nov. 16	1st Nov. 23 2nd Dec. 21	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Nov. 9	Nov. 9 - Nov. 16	Nov. 23	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks.....	Nov. 9	Nov. 9 - Nov. 23	Nov. 23	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM FEBRUARY 1, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Calvert's Gold..... Charm.....	Nov. 2	Nov. 2 - Nov. 16	Nov. 16	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandrock..... Mermaid.....	Nov. 2	Nov. 2 - Nov. 23	Nov. 16	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Nov. 9	Nov. 9 - Nov. 16	Nov. 23	no
Chalk Cliff..... S Cossack..... S Red Star..... S Criterion..... Personality..... Portrait Varieties..... S Loubens.....	Nov. 9	Nov. 9 - Nov. 23	Nov. 23	no
Granite State..... Patterson's White.....	Nov. 9	Nov. 9 - Nov. 30	Nov. 23	no
Queen's Lace..... Gold Lace.....	Nov. 9	Nov. 9 - Nov. 23	1st Nov. 30 2nd Dec. 28	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Woking Scarlet..... Frolic..... S Pink Deluxe.....	Nov. 16	Nov. 16 - Nov. 23	Nov. 30	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks.....	Nov. 16	Nov. 16 - Nov. 30	Nov. 30	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM FEBRUARY 8, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Nov. 9	Nov. 9 - Nov. 23	Nov. 23	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandroek..... Mermaid.....	Nov. 9	Nov. 9 - Nov. 30	Nov. 23	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Nov. 16	Nov. 16 - Nov. 23	Nov. 30	no
Chalk Cliff..... S Cossack..... S Red Star..... S Criterion..... Personality..... Portrait Varieties..... S Loubens.....	Nov. 16	Nov. 16 - Nov. 30	Nov. 30	no
Granite State..... Patterson's White.....	Nov. 16	Nov. 16 - Dec. 7	Nov. 30	no
Queen's Lace..... Gold Lace.....	Nov. 16	Nov. 16 - Nov. 30	1st Dec. 7 2nd Jan. 4	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Woking Scarlet..... Frolic..... S Pink Deluxe.....	Nov. 23	Nov. 23 - Nov. 30	Dec. 7	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks.....	Nov. 23	Nov. 23 - Dec. 7	Dec. 7	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM FEBRUARY 15, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Calvert's Gold..... Charm.....	Nov. 16	Nov. 16 - Nov. 30	Nov. 30	no
Oregon..... Oregon Trail..... Yellow Delaware..... Delaware..... S Sandrocks..... Mermaid.....	Nov. 16	Nov. 16 - Dec. 7	Nov. 30	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Nov. 23	Nov. 23 - Nov. 30	Dec. 7	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... S Loubens.....	Nov. 23	Nov. 23 - Dec. 7	Dec. 7	no
Granite State..... Patterson's White.....	Nov. 23	Nov. 23 - Dec. 14	Dec. 7	no
Queen's Lace..... Gold Lace.....	Nov. 23	Nov. 23 - Dec. 7	1st Dec. 14 2nd Jan. 11	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Nov. 30	Nov. 30 - Dec. 7	Dec. 14	no
Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks.....	Nov. 30	Nov. 30 - Dec. 14	Dec. 14	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM FEBRUARY 22, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe Calvert's Gold Charm	Nov. 23	Nov. 23 - Dec. 7	Dec. 7	no
Oregon Oregon Trail Yellow Delaware Delaware Sandrock Mermaid	Nov. 23	Nov. 23 - Dec. 14	Dec. 7	no
S Valentine S Calvert's Orange Vedova Venoya	Nov. 30	Nov. 30 - Dec. 7	Dec. 14	no
Chalk Cliff S Cossack S Red Star Criterion Personality Portrait Varieties S Loubens	Nov. 30	Nov. 30 - Dec. 14	Dec. 14	no
Granite State Patterson's White	Nov. 30	Nov. 30 - Dec. 21	Dec. 14	no
Queen's Lace Gold Lace	Nov. 30	Nov. 30 - Dec. 14	1st Dec. 21 2nd Jan. 18	no
Snow Crystal Ice Follies Little America Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Dec. 7	Dec. 7 - Dec. 14	Dec. 21	no
Luna Snowclad Sundial S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero Bridesmaid Queen of Pinks	Dec. 7	Dec. 7 - Dec. 21	Dec. 21	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM FEBRUARY 29, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Nov. 30	Nov. 30 - Dec. 14	Dec. 14	no
S Oregon..... S Oregon Trail..... Yellow Delaware..... Delaware..... Incurve Delaware..... S Sandrock..... Mermaid.....	Nov. 30	Nov. 30 - Dec. 21	Dec. 14	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Dec. 7	Dec. 7 - Dec. 14	Dec. 21	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... Humdinger..... S Loubens.....	Dec. 7	Dec. 7 - Dec. 21	Dec. 21	no
Granite State..... Patterson's White.....	Dec. 7	Dec. 7 - Dec. 28	Dec. 21	no
Queen's Lace..... Gold Lace.....	Dec. 7	Dec. 7 - Dec. 21	1st Dec. 28 2nd Jan. 25	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Dec. 14	Dec. 14 - Dec. 21	Dec. 28	no
Monty..... Quicksilver..... Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks..... S Blue Ribbon.....	Dec. 14	Dec. 14 - Dec. 28	Dec. 28	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MARCH 7, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaillon Deluxe..... Calvert's Gold..... Charm.....	Dec. 7	Dec. 7 - Dec. 21	Dec. 21	no
S Oregon..... S Oregon Trail..... Yellow Delaware..... Delaware..... Incurve Delaware..... S Sandrock..... Mermaid.....	Dec. 7	Dec. 7 - Dec. 28	Dec. 21	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Dec. 14	Dec. 14 - Dec. 21	Dec. 28	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... Humdinger..... S Loubens.....	Dec. 14	Dec. 14 - Dec. 28	Dec. 28	no
Granite State..... Patterson's White.....	Dec. 14	Dec. 14 - Jan. 4	Dec. 28	no
Queen's Lace..... Gold Lace.....	Dec. 14	Dec. 14 - Dec. 28	1st Jan. 4 2nd Feb. 1	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Woking Scarlet..... Frolic..... S Pink Deluxe.....	Dec. 21	Dec. 21 - Dec. 28	Jan. 4	no
Monty..... Quicksilver..... Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks..... S Blue Ribbon.....	Dec. 21	Dec. 21 - Jan. 4	Jan. 4	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MARCH 14, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Calvert's Gold..... Charm.....	Dec. 14	Dec. 14 - Dec. 28	Dec. 28	no
S Oregon..... S Oregon Trail..... Yellow Delaware..... Delaware..... Incurve Delaware..... S Sandrock..... Mermaid.....	Dec. 14	Dec. 14 - Jan. 4	Dec. 28	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Dec. 21	Dec. 21 - Dec. 28	Jan. 4	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... Humdinger..... S Loubens.....	Dec. 21	Dec. 21 - Jan. 4	Jan. 4	no
Granite State..... Patterson's White.....	Dec. 21	Dec. 21 - Jan. 11	Jan. 4	no
Queen's Lace..... Gold Lace.....	Dec. 21	Dec. 21 - Jan. 4	1st Jan. 11 2nd Feb. 8	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Woking Scarlet..... Frolic..... S Pink Deluxe.....	Dec. 28	Dec. 28 - Jan. 4	Jan. 11	no
Monty..... Quicksilver..... Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks..... S Blue Ribbon.....	Dec. 28	Dec. 28 - Jan. 11	Jan. 11	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MARCH 21, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe..... Calvert's Gold..... Charm.....	Dec. 21	Dec. 21 - Jan. 4	Jan. 4	no
S Oregon..... S Oregon Trail..... Yellow Delaware..... Delaware..... Incurve Delaware..... S Sandrock..... Mermaid.....	Dec. 21	Dec. 21 - Jan. 11	Jan. 4	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Dec. 28	Dec. 28 - Jan. 4	Jan. 11	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... Humdinger..... S Loubens.....	Dec. 28	Dec. 28 - Jan. 11	Jan. 11	no
Granite State..... Patterson's White.....	Dec. 28	Dec. 28 - Jan. 18	Jan. 11	no
Queen's Lace..... Gold Lace.....	Dec. 28	Dec. 28 - Jan. 11	1st Jan. 18 2nd Feb. 15	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Jan. 4	Jan. 4 - Jan. 11	Jan. 18	no
Monty..... Quicksilver..... Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Bridesmaid..... Queen of Pinks..... S Blue Ribbon.....	Jan. 4	Jan. 4 - Jan. 14	Jan. 14	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MARCH 28, 1960

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Charm.....	Dec. 28	Dec. 28- Jan. 11	Jan. 11	no
S Oregon..... S Oregon Trail..... Yellow Delaware..... Delaware..... S Sandroek..... Mermaid.....	Dec. 28	Dec. 28 - Jan. 18	Jan. 11	no
S Valentine..... S Calvert's Orange..... Vedova..... Venoya.....	Jan. 4	Jan. 4 - Jan. 11	Jan. 18	no
Chalk Cliff..... S Cossack..... S Red Star..... Criterion..... Personality..... Portrait Varieties..... Humdinger..... S Loubens.....	Jan. 4	Jan. 4 - Jan. 14	Jan. 14	no
Granite State..... Wilson's White..... Wilson's Yellow.....	Jan. 4	Jan. 4 - Jan. 21	Jan. 14	no
Queen's Lace..... Gold Lace..... Illini Snowdrift.....	Jan. 4	Jan. 4 - Jan. 14	1st Jan. 21 2nd Feb. 18	no
Snow Crystal..... Ice Follies..... Little America..... Ind. Varieties..... S Vulcan..... S Woking Scarlet..... Frolic..... S Pink Deluxe.....	Jan. 11	Jan. 11 - Jan. 14	Jan. 21	no
Monty..... Quicksilver..... Luna..... Snowclad..... Sundial..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero..... Resolute..... Alex Colson..... Bridesmaid..... Queen of Pinks..... S Blue Ribbon.....	Jan. 11	Jan. 11 - Jan. 21	Jan. 21	no
Gardenia..... Blazing Gold.....	Jan. 18	Jan. 18 - Jan. 28	Jan. 28	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM APRIL 6, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe.....	Jan. 5	Jan. 5 - Jan. 15	Jan. 15	no
S Oregon.....	Jan. 5	Jan. 5 - Jan. 22	Jan. 15	no
S Yellow Delaware.....				
S Delaware.....				
S Mermaid.....				
Chalk Cliff.....	Jan. 12	Jan. 12 - Jan. 22	Jan. 22	no
Criterion.....				
Personality.....				
Humdinger.....				
Granite State.....	Jan. 12	Jan. 12 - Jan. 29	Jan. 22	no
S Wilson's White.....				
S Wilson's Yellow.....				
Queen's Lace.....	Jan. 12	Jan. 12 - Jan. 22	1st Jan. 29	no
Gold Lace.....			2nd Feb. 26	
Snow Crystal.....	Jan. 19	Jan. 19 - Jan. 22	Jan. 29	no
Little America.....				
Ind. Varieties.....				
Portrait Varieties.....				
S Pink Deluxe.....				
Monty.....	Jan. 19	Jan. 19 - Jan. 29	Jan. 29	no
Snowclad.....				
Luna.....				
Resolute.....				
S Blue Ribbon.....				
Queen of Pinks.....				
Gardenia.....	Jan. 26	Jan. 26 - Feb. 5	Feb. 5	no
Blazing Gold.....				

BLOOM APRIL 13, 1959

Bonnaffon Deluxe.....	Jan. 12	Jan. 12 - Jan. 22	Jan. 22	Mar. 16
S Oregon.....	Jan. 12	Jan. 12 - Jan. 29	Jan. 22	Mar. 23
S Yellow Delaware.....				
S Delaware.....				
S Mermaid.....				
Chalk Cliff.....	Jan. 19	Jan. 19 - Jan. 29	Jan. 29	Mar. 23
Criterion.....				
Personality.....				
Humdinger.....				
Granite State.....	Jan. 19	Jan. 19 - Feb. 5	Jan. 29	Mar. 30
S Wilson's White.....				
S Wilson's Yellow.....				
Queen's Lace.....	Jan. 19	Jan. 19 - Jan. 29	1st Feb. 5	Mar. 23
Gold Lace.....			2nd Mar. 5	
Snow Crystal.....	Jan. 26	Jan. 26 - Jan. 29	Feb. 5	Mar. 23
Little America.....				
Ind. Varieties.....				
Portrait Varieties.....				
S Pink Deluxe.....				
Monty.....	Feb. 2	Feb. 2 - Feb. 9	Feb. 9	Mar. 30
Snowclad.....				
Luna.....				
Resolute.....				
Blue Ribbon.....				
Queen of Pinks.....				
Gardenia.....	Feb. 9	Feb. 9 - Feb. 16	Feb. 16	Apr. 6
Blazing Gold.....				

Year-Round Pot Plant Schedule

BLOOM APRIL 20, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe	Jan. 19	Jan. 19 - Jan. 29	Jan. 29	Mar. 16
S Oregon				
S Yellow Delaware	Jan. 19	Jan. 19 - Feb. 5	Jan. 29	Mar. 23
S Delaware				
Mermaid				
Chalk Cliff				
Criterion	Feb. 2	Feb. 2 - Feb. 9	Feb. 9	Mar. 23
Personality				
Humdinger				
Granite State	Feb. 2	Feb. 2 - Feb. 16	Feb. 9	Mar. 30
S Wilson's White				
S Wilson's Yellow				
Queen's Lace	Feb. 2	None	1st Feb. 9	Mar. 23
Gold Lace			2nd Mar. 9	
Snow Crystal				
Little America	Feb. 9	None	Feb. 16	Mar. 23
Ind. Varieties				
Portrait Varieties				
S Pink Deluxe				
Monty				
Snowclad	Feb. 9	Feb. 9 - Feb. 16	Feb. 16	Mar. 30
Luna				
Resolute				
S Blue Ribbon				
Ostosa				
Larry				
Chris Columbus				
Jessamine Williams				
Benora				
Maestra				
Pilgrim				
Gardenia				
Yel. Chris Columbus				
Moonlight				
Astoria				
Yellow Spoon				
Kings Ransom				
Sunburst				
Blazing Gold				
W. P. Snyder				
Lipstick				
Remembrance	Feb. 16	Feb. 16 - Feb. 23	Feb. 23	Apr. 6
Aglow				
Mona				
Dolli-Ette				
Toronto				
Morocco				
Coralhue				
Mrs. DuPont				
Radiance				
Majestic				
Lee-Ette				
Spellbound				
Mischief				
Joybringer				
Raspberry Ice				
Alert				
Candytuff				
Cupid				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM APRIL 27, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe	Feb. 2	Feb. 2 - Feb. 9	Feb. 9	Mar. 16
S Oregon				
S Yellow Delaware	Feb. 2	Feb. 2 - Feb. 16	Feb. 9	Mar. 23
S Delaware				
Mermaid				
Chalk Cliff	Feb. 9	Feb. 9 - Feb. 16	Feb. 16	Mar. 23
Criterion				
Personality				
Humdinger				
Granite State	Feb. 9	Feb. 9 - Feb. 23	Feb. 16	Mar. 30
S Wilson's White				
S Wilson's Yellow				
Queen's Lace	Feb. 9	None	1st Feb. 16 2nd Mar. 16	Mar. 23
Gold Lace				
Snow Crystal	Feb. 16	None	Feb. 23	Mar. 23
Little America				
Ind. Varieties				
Portrait Varieties				
S Pink Deluxe				
Monty	Feb. 16	Feb. 16 - Feb. 23	Feb. 23	Mar. 30
Snowclad				
Luna				
Resolute				
S Blue Ribbon				
Ostosa				
Larry				
Chris Columbus				
Jessamine Williams ..				
Benora				
Maestra				
Pilgrim				
Gardenia				
Yel. Chris Columbus ..				
Moonlight				
Astoria				
Yellow Spoon				
Kings Ransom				
Sunburst				
Blazing Gold				
W. P. Snyder				
Lipstick	Feb. 23	Feb. 23 - Mar. 2	Mar. 2	Apr. 6
Remembrance				
Aglow				
Mona				
Dolli-Ette				
Toronto				
Morocco				
Coralhue				
Mrs. DuPont				
Radiance				
Majestic				
Lee-Ette				
Spellbound				
Mischief				
Joybringer				
Raspberry Ice				
Alert				
Candyfuff				
Cupid				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MAY 4, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe.....	Feb. 9	Feb. 9 - Feb. 16	Feb. 16	Mar. 16
S Oregon.....	Feb. 9	Feb. 9 - Feb. 23	Feb. 16	Mar. 23
S Yellow Delaware.....				
S Delaware.....				
S Mermaid.....				
Chalk Cliff.....	Feb. 16	Feb. 16 - Feb. 23	Feb. 23	Mar. 23
Criterion.....				
Personality.....				
Humdinger.....				
Granite State.....	Feb. 16	Feb. 16 - Mar. 2	Feb. 23	Mar. 30
S Wilson's White.....				
S Wilson's Yellow.....				
Queen's Lace.....	Feb. 16	None	1st Feb. 23	Mar. 23
Gold Lace.....			2nd Mar. 23	
Snow Crystal.....	Feb. 23	None	Mar. 2	Mar. 23
Little America.....				
Ind. Varieties.....				
Portrait Varieties.....				
S Pink Deluxe.....				
Monty.....	Feb. 23	Feb. 23 - Mar. 2	Mar. 2	Mar. 30
Snowclad.....				
Luna.....				
Resolute.....				
S Blue Ribbon.....				
Ostosa.....	Mar. 2	Mar. 2 - Mar. 9	Mar. 9	Apr. 6
Larry.....				
Chris Columbus.....				
Jessamine Williams..				
Benora.....				
Maestra.....				
Pilgrim.....				
Gardenia.....				
Yel. Chris Columbus..				
Moonlight.....				
Astoria.....				
Yellow Spoon.....				
Kings Ransom.....				
Sunburst.....				
Blazing Gold.....				
W. P. Snyder.....				
Lipstick.....				
Remembrance.....				
Aglow.....				
Mona.....				
Dolli-Ette.....				
Toronto.....				
Morocco.....				
Coralhue.....				
Mrs. DuPont.....				
Radiance.....				
Majestic.....				
Lee-Ette.....				
Spellbound.....				
Mischief.....				
Joybringer.....				
Raspberry Ice.....				
Alert.....				
Candyfuff.....				
Cupid.....				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MAY 11, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Feb. 16	Feb. 16 - Feb. 23	Feb. 23	Mar. 16
S Oregon	Feb. 16	Feb. 16 - Mar. 2	Feb. 23	Mar. 23
S Yellow Delaware				
S Delaware				
Mermaid				
Chalk Cliff	Feb. 23	Feb. 23 - Mar. 2	Mar. 2	Mar. 23
Criterion				
Personality				
Humdinger				
Granite State	Feb. 23	Feb. 23 - Mar. 9	Mar. 2	Mar. 30
S Wilson's White				
S Wilson's Yellow				
Queen's Lace	Feb. 23	None	1st Mar. 2	Mar. 23
Gold Lace			2nd Mar. 30	
Snow Crystal	Mar. 2	None	Mar. 9	Mar. 23
Ind. Varieties				
Portrait Varieties				
S Pink Deluxe				
Monty	Mar. 2	Mar. 2 - Mar. 9	Mar. 9	Mar. 30
Snowclad				
Luna				
Resolute				
S Blue Ribbon	Mar. 9	Mar. 9 - Mar. 16	Mar. 16	Apr. 6
Ostosa				
Larry				
Chris Columbus				
Jessamine Williams ..				
Benora				
Maestra				
Pilgrim				
Gardenia				
Yel. Chris Columbus ..				
Moonlight				
Astoria				
Yellow Spoon				
Kings Ransom				
Sunburst				
Blazing Gold				
W. P. Snyder				
Lipstick				
Remembrance				
Aglow				
Mona				
Dolli-Ette				
Toronto				
Morocco				
Coralhue				
Mrs. DuPont				
Radiance				
Majestic				
Lee-Ette				
Spellbound				
Mischief				
Joybringer				
Raspberry Ice				
Alert				
Fuchsia Fairy				
Candytuft				
Cupid				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MAY 18, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe.....	Feb. 23	Feb. 23 - Mar. 2	Mar. 2	Mar. 16
S Oregon.....	Feb. 23	Feb. 23 - Mar. 9	Mar. 2	Mar. 23
S Yellow Delaware.....				
S Delaware.....				
Mermaid.....				
Chalk Cliff.....	Mar. 2	Mar. 2 - Mar. 9	Mar. 9	Mar. 23
Criterion.....				
Personality.....				
Humdinger.....				
Granite State.....	Mar. 2	Mar. 2 - Mar. 16	Mar. 9	Mar. 30
S Wilson's White.....				
S Wilson's Yellow.....				
Queen's Lace.....	Mar. 2	None	1st Mar. 9	Mar. 23
Gold Lace.....			2nd Apr. 6	
Snow Crystal.....	Mar. 9	None	Mar. 16	Mar. 23
Ind. Varieties.....				
Portrait Varieties.....				
S Pink Deluxe.....				
Monty.....	Mar. 9	Mar. 9 - Mar. 16	Mar. 16	Mar. 30
Snowclad.....				
Luna.....				
Resolute.....				
Blue Ribbon.....				
Ostosa.....	Mar. 16	Mar. 16 - Mar. 23	Mar. 23	Apr. 6
Larry.....				
Chris Columbus.....				
Jessamine Williams..				
Benora.....				
Maestra.....				
Pilgrim.....				
Gardenia.....				
Yel. Chris Columbus..				
Moonlight.....				
Astoria.....				
Yellow Spoon.....				
Kings Ransom.....				
Sunburst.....				
Blazing Gold.....				
W. P. Snyder.....				
Lipstick.....				
Remembrance.....				
Aglow.....				
Mona.....				
Dolli-Ette.....				
Toronto.....				
Morocco.....				
Coralhue.....				
Mrs. DuPont.....				
Radiance.....				
Majestic.....				
Lee-Ette.....				
Spellbound.....				
Mischief.....				
Joybringer.....				
Raspberry Ice.....				
Alert.....				
Fuchsia Fairy.....				
Candyfuff.....				
Cupid.....				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM MAY 25, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Mar. 2	Mar. 2 - Mar. 9	Mar. 9	Mar. 16
S Oregon	Mar. 2	Mar. 2 - Mar. 16	Mar. 9	Mar. 23
S Yellow Delaware				
S Delaware				
Mermaid				
Chalk Cliff	Mar. 9	Mar. 9 - Mar. 16	Mar. 16	Mar. 23
Criterion				
Personality				
Humdinger				
Granite State	Mar. 9	Mar. 9 - Mar. 23	Mar. 16	Mar. 30
S Wilson's White				
S Wilson's Yellow				
Queen's Lace	Mar. 9	None	1st Mar. 16	Mar. 23
Gold Lace			2nd Apr. 23	
Snow Crystal	Mar. 16	None	Mar. 23	Mar. 23
Ind. Varieties				
Portrait Varieties				
S Pink Deluxe				
Monty	Mar. 16	Mar. 16 - Mar. 23	Mar. 23	Mar. 30
Snowclad				
Luna				
Resolute				
Blue Ribbon				
Ostosa	Mar. 23	Mar. 23 - Mar. 30	Mar. 30	Apr. 6
Larry				
Chris Columbus				
Jessamine Williams ..				
Benora				
Maestra				
Pilgrim				
Gardenia				
Yel. Chris Columbus ..				
Moonlight				
Astoria				
Yellow Spoon				
Kings Ransom				
Sunburst				
Blazing Gold				
W. P. Snyder				
Lipstick				
Remembrance				
Aglow				
Mona				
Dolli-Ette				
Toronto				
Morocco				
Coralhue				
Mrs. DuPont				
Radiance				
Majestic				
Lee-Ette				
Spellbound				
Mischief				
Joybringer				
Raspberry Ice				
Alert				
Fuchsia Fairy				
Candyfuff				
Cupid				

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM JUNE 1, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Mar. 9	Mar. 9 - Mar. 16	Mar. 16	Mar. 16
S Oregon S Yellow Delaware S Incurve Delaware Mermaid	Mar. 9	Mar. 9 - Mar. 23	Mar. 16	Mar. 23
Granite State S Wilson's White S Wilson's Yellow	Mar. 16	Mar. 16 - Mar. 30	Mar. 23	Mar. 30
Queen's Lace Gold Lace	Mar. 16	None	1st Mar. 23 2nd Apr. 30	Mar. 23
Snow Crystal Criterion Humdinger Personality Portrait Varieties S Pink Deluxe	Mar. 23	None	Mar. 30	Mar. 23
Monty Snowclad Luna Resolute S Blue Ribbon	Mar. 23	Mar. 23 - Mar. 30	Mar. 30	Mar. 30

BLOOM JUNE 8, 1959

Bonnaffon Deluxe	Mar. 16	Mar. 16 - Mar. 23	Mar. 23	Mar. 23
S Oregon S Yellow Delaware S Incurve Delaware Mermaid	Mar. 16	Mar. 16 - Mar. 30	Mar. 23	Mar. 30
Granite State S Wilson's White S Wilson's Yellow	Mar. 23	Mar. 23 - Apr. 6	Mar. 30	Apr. 6
Queen's Lace Gold Lace	Mar. 23	None	1st Mar. 30 2nd Apr. 27	Mar. 23
Snow Crystal Criterion Humdinger Personality Portrait Varieties S Pink Deluxe	Mar. 30	None	Apr. 6	Mar. 30
Monty Snowclad Luna Resolute S Blue Ribbon	Mar. 30	Mar. 30 - Apr. 6	Apr. 6	Apr. 6

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM JUNE 15, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Mar. 23	Mar. 23 - Mar. 30	Mar. 30	Mar. 30
S Oregon				
S Yellow Delaware	Mar. 23	Mar. 23 - Apr. 6	Mar. 30	Apr. 6
S Incurve Delaware				
Mermaid				
Granite State				
S Wilson's White	Mar. 30	Mar. 30 - Apr. 13	Apr. 6	Apr. 13
S Wilson's Yellow				
Queen's Lace	Mar. 30	None	1st Apr. 6 2nd May 4	Mar. 30
Gold Lace				
Snow Crystal				
Criferion				
Humdinger	Apr. 6	None	Apr. 13	Apr. 6
Personality				
Portrait Varieties				
S Pink Deluxe				
Monty				
Luna				
Resolute				
Blue Ribbon	Apr. 6	Apr. 6 - Apr. 13	Apr. 13	Apr. 13
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				
S Malou				

BLOOM JUNE 22, 1959

Bonnaffon Deluxe	Mar. 30	Mar. 30 - Apr. 6	Apr. 6	Apr. 6
S Oregon				
S Yellow Delaware	Mar. 30	Mar. 30 - Apr. 13	Apr. 6	Apr. 13
S Incurve Delaware				
Mermaid				
S Wilson's White	Apr. 6	Apr. 6 - Apr. 20	Apr. 13	Apr. 20
S Poitevine Supreme				
Queen's Lace	Apr. 6	None	1st Apr. 13 2nd May 4	Apr. 6
Gold Lace				
Capricorn				
Luminary				
Scepter				
Red Star	Apr. 6	Apr. 6 - Apr. 13	Apr. 13	Apr. 13
Criferion				
Personality				
Humdinger				
S Loubens				
Snow Crystal	Apr. 13	None	Apr. 20	Apr. 13
S Pink Deluxe				
Portrait Varieties				
S Quicksilver				
Luna				
Sundial				
Resolute				
Alex Colson	Apr. 13	Apr. 13 - Apr. 20	Apr. 20	Apr. 20
S Blue Ribbon				
Bridesmaid				
S Malou				
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				

Year-Round Pot Plant Schedule

BLOOM JUNE 29, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Apr. 6	Apr. 6 - Apr. 13	Apr. 13	Apr. 13
S Oregon	Apr. 6	Apr. 6 - Apr. 20	Apr. 13	Apr. 20
S Oregon Trail				
S Yellow Delaware				
Mermaid				
S Wilson's White	Apr. 13	Apr. 13 - Apr. 27	Apr. 20	Apr. 27
S Poitevine Supreme ...				
S Capricorn	Apr. 13	Apr. 13 - Apr. 20	Apr. 20	Apr. 20
Luminary				
Scepter				
Red Star				
Criterion				
S Loubens				
Portrait Varieties				
Snow Crystal	Apr. 20	None	Apr. 27	Apr. 20
Pink Deluxe				
S Quicksilver	Apr. 20	Apr. 20 - Apr. 27	Apr. 27	Apr. 27
Sundial				
Resolute				
S Blue Ribbon				
Bridesmaid				
S Malou				
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				
Alex Colson	Apr. 27	None	May 4	Apr. 27

BLOOM JULY 6, 1959

Bonnaffon Deluxe	Apr. 13	Apr. 13 - Apr. 20	Apr. 20	Apr. 20
S Oregon	Apr. 13	Apr. 13 - Apr. 27	Apr. 20	Apr. 27
S Oregon Trail				
S Yellow Delaware				
S Sandrock				
Mermaid				
S Wilson's White	Apr. 20	Apr. 20 - May 4	Apr. 27	May 4
S Poitevine Supreme ...				
S Capricorn	Apr. 20	Apr. 20 - Apr. 27	Apr. 27	Apr. 27
Luminary				
Scepter				
Red Star				
Criterion				
Portrait Varieties				
S Loubens				
Snow Crystal	Apr. 27	None	May 4	Apr. 27
Pink Deluxe				
S Quicksilver	Apr. 27	Apr. 27 - May 4	May 4	May 4
Sundial				
Resolute				
S Blue Ribbon				
Bridesmaid				
S Malou				
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				
Alex Colson	May 4	None	May 11	May 4

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM JULY 13, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe	Apr. 20	Apr. 20 - Apr. 27	Apr. 27	Apr. 27
S Oregon	Apr. 20	Apr. 20 - May 4	Apr. 27	May 4
S Oregon Trail				
S Yellow Delaware				
S Sandrock				
Mermaid				
S Wilson's White	Apr. 27	Apr. 27 - May 11	May 4	May 11
S Poitevine Supreme				
S Capricorn	Apr. 27	Apr. 27 - May 4	May 4	May 4
Luminary				
Scepter				
Red Star				
Criterion				
S Loubens				
Portrait Varieties				
Snow Crystal	May 4	None	May 11	May 4
Pink Deluxe				
S Quicksilver	May 4	May 4 - May 11	May 11	May 11
Sundial				
Resolute				
S Blue Ribbon				
Bridesmaid				
S Malou				
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				
Alex Colson	May 11	None	May 18	May 11

BLOOM JULY 20, 1959

Bonnaffon Deluxe	Apr. 27	Apr. 27 - May 4	May 4	May 4
S Oregon	Apr. 27	Apr. 27 - May 11	May 4	May 11
S Oregon Trail				
S Yellow Delaware				
S Sandrock				
Mermaid				
S Wilson's White	May 4	May 4 - May 18	May 11	May 18
S Poitevine Supreme				
S Capricorn	May 4	May 4 - May 11	May 11	May 11
Luminary				
Scepter				
Red Star				
Criterion				
Portrait Varieties				
S Loubens				
Snow Crystal	May 11	None	May 18	May 11
Pink Deluxe				
S Quicksilver	May 11	None	May 18	May 18
Sundial				
Resolute				
S Blue Ribbon				
Bridesmaid				
S Malou				
S Mrs. Wolfe				
S Mrs. Palmero				
S Bronze Palmero				
Alex Colson	May 18	None	May 25	May 18

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM JULY 27, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnaffon Deluxe	May 4	May 11	May 11
S Oregon			
S Oregon Trail			
S Yellow Delaware	May 4	May 11	May 18
S Sandrock			
Mermaid			
S Wilson's White	May 11	May 18	May 25
S Poitevine Supreme			
S Capricorn			
Luminary			
Scepter			
Red Star	May 11	May 18	May 18
Criterion			
S Loubens			
Portrait Varieties			
Snow Crystal	May 18	May 25	May 18
Pink Deluxe			
S Quicksilver			
Sundial			
Resolute			
S Blue Ribbon			
Bridesmaid	May 18	May 25	May 25
S Malou			
S Mrs. Wolfe			
S Mrs. Palmero			
S Bronze Palmero			
Alex Colson	May 25	June 1	May 25

BLOOM AUGUST 3, 1959

Bonnaffon Deluxe	May 11	May 18	May 18
S Oregon			
S Oregon Trail			
S Yellow Delaware	May 11	May 18	May 25
S Sandrock			
Mermaid			
S Wilson's White	May 18	May 25	June 1
S Poitevine Supreme			
S Capricorn			
Luminary			
Scepter			
Red Star	May 18	May 25	May 25
Criterion			
Portrait Varieties			
S Loubens			
Snow Crystal	May 25	June 1	May 25
Pink Deluxe			
S Quicksilver			
Sundial			
Resolute			
S Blue Ribbon			
Bridesmaid	May 25	June 1	June 1
S Malou			
S Mrs. Wolfe			
S Mrs. Palmero			
S Bronze Palmero			
Alex Colson	June 1	June 8	June 1

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM AUGUST 10, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnaffon Deluxe.....	May 18	May 25	May 25
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	May 18	May 25	June 1
S Sandrock.....			
Mermaid.....			
S Wilson's White.....	May 25	June 1	June 8
S Poitevine Supreme.....			
S Capricorn.....			
Luminary.....			
Scepter.....			
Red Star.....	May 25	June 1	June 1
Criterion.....			
S Loubens.....			
Portrait Varieties.....			
Snow Crystal.....	June 1	June 8	June 1
Pink Deluxe.....			
S Quicksilver.....			
Sundial.....			
Resolute.....			
S Blue Ribbon.....	June 1	June 8	June 8
Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	June 8	June 15	June 8

BLOOM AUGUST 17, 1959

Bonnaffon Deluxe.....	May 25	June 1	June 1
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	May 25	June 1	June 8
S Sandrock.....			
Mermaid.....			
S Wilson's White.....	June 1	June 8	June 15
S Poitevine Supreme.....			
S Capricorn.....			
Luminary.....			
Scepter.....			
Red Star.....	June 1	June 8	June 8
Criterion.....			
Portrait Varieties.....			
S Loubens.....			
Snow Crystal.....	June 8	June 15	June 8
Pink Deluxe.....			
S Quicksilver.....			
Sundial.....			
Resolute.....			
S Blue Ribbon.....	June 8	June 15	June 15
Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	June 15	June 22	June 15

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM AUGUST 24, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnafton Deluxe	June 1	June 8	June 1
S Oregon			
S Oregon Trail			
S Yellow Delaware	June 1	June 8	June 15
S Sandrock			
Mermaid			
S Wilson's White	June 8	June 15	June 22
S Poitevine Supreme			
S Capricorn			
Luminary			
Scepter			
Red Star	June 8	June 15	June 15
Criterion			
Humdinger			
S Loubens			
Snow Crystal	June 15	June 22	June 15
Pink Deluxe			
S Quicksilver			
Sundial			
Resolute			
S Blue Ribbon	June 15	June 22	June 22
Bridesmaid			
S Malou			
S Mrs. Wolfe			
S Mrs. Palmero			
S Bronze Palmero			
Alex Colson	June 22	June 29	June 22

BLOOM AUGUST 31, 1959

Bonnafton Deluxe	June 8	June 15	June 8
S Oregon			
S Oregon Trail			
S Yellow Delaware	June 8	June 15	June 22
S Sandrock			
Mermaid			
S Wilson's White	June 15	June 22	June 29
S Poitevine Supreme			
S Capricorn			
Luminary			
Scepter			
Red Star	June 15	June 22	June 22
Criterion			
Humdinger			
S Golden Favourite			
S Loubens			
Snow Crystal	June 22	June 29	June 22
Pink Deluxe			
S Quicksilver			
Sundial			
Resolute			
S Blue Ribbon	June 22	June 29	June 29
Bridesmaid			
S Malou			
S Mrs. Wolfe			
S Mrs. Palmero			
S Bronze Palmero			
Alex Colson	June 29	July 6	June 29

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM SEPTEMBER 7, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnaffon Deluxe.....	June 15	June 22	June 15
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	June 15	June 22	June 29
S Delaware.....			
S Sandrock.....			
S Mermaid.....			
S Wilson's White.....	June 22	June 29	July 6
S Poitevine Supreme.....			
S Capricorn.....			
Luminary.....			
Scepter.....			
Red Star.....	June 22	June 29	June 29
S Criterion.....			
S Personality.....			
S Humdinger.....			
S Loubens.....			
S Golden Favourite.....			
Snow Crystal.....	June 29	July 6	June 29
Pink Deluxe.....			
S Quicksilver.....			
Sundial.....			
Resolute.....			
S Blue Ribbon.....	June 29	July 6	July 6
S Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	July 6	July 13	July 6
Royal Bronze.....			

BLOOM SEPTEMBER 14, 1959

Bonnaffon Deluxe.....	June 22	June 29	June 22
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	June 22	June 29	July 6
S Delaware.....			
S Sandrock.....			
S Mermaid.....			
S Wilson's White.....	June 29	July 6	July 13
S Poitevine Supreme.....			
S Capricorn.....			
Luminary.....			
Scepter.....			
Red Star.....	June 29	July 6	July 6
S Criterion.....			
S Humdinger.....			
S Golden Favourite.....			
S Loubens.....			
Snow Crystal.....	July 6	July 13	July 6
Pink Deluxe.....			
S Quicksilver.....			
Sundial.....			
Resolute.....			
S Blue Ribbon.....	July 6	July 13	July 13
S Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	July 13	July 20	July 13
Royal Bronze.....			

Year-Round Pot Plant Schedule

BLOOM SEPTEMBER 21, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnaffon Deluxe.....	June 29	July 6	June 29
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	June 29	July 6	July 13
S Delaware.....			
S Sandrock.....			
S Mermaid.....			
S Wilson's White.....	July 6	July 13	July 20
S Poitevine Supreme.....			
S Capricorn.....			
S Luminary.....			
S Scepter.....			
S Red Star.....	July 6	July 13	July 13
S Criterion.....			
S Personality.....			
S Humdinger.....			
S Loubens.....			
S Golden Favourite.....			
S Snow Crystal.....	July 13	July 20	July 13
S Pink Deluxe.....			
S Quicksilver.....			
S Sundial.....			
S Resolute.....			
S Blue Ribbon.....	July 13	July 20	July 20
S Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	July 20	July 27	July 20
Royal Bronze.....			

BLOOM SEPTEMBER 28, 1959

Bonnaffon Deluxe.....	July 6	July 13	July 6
S Oregon.....			
S Oregon Trail.....			
S Yellow Delaware.....	July 6	July 13	July 20
S Delaware.....			
S Sandrock.....			
S Mermaid.....			
S Wilson's White.....	July 13	July 20	July 27
S Poitevine Supreme.....			
S Capricorn.....			
S Luminary.....			
S Scepter.....			
S Red Star.....	July 13	July 20	July 20
S Criterion.....			
S Humdinger.....			
S Golden Favourite.....			
S Loubens.....			
S Snow Crystal.....	July 20	July 27	July 20
S Pink Deluxe.....			
S Quicksilver.....			
S Sundial.....			
S Resolute.....			
S Blue Ribbon.....	July 20	July 27	July 27
S Bridesmaid.....			
S Malou.....			
S Mrs. Wolfe.....			
S Mrs. Palmero.....			
S Bronze Palmero.....			
Alex Colson.....	July 27	Aug. 3	July 27
Royal Bronze.....			

Year-Round Pot Plant Schedule

BLOOM OCTOBER 5, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bonnafton Deluxe			
S Calvert's Gold	July 13	July 20	July 20
Charm			
S Oregon			
S Oregon Trail			
S Yellow Delaware	July 13	July 20	July 27
S Delaware			
S Sandroek			
Mermaid			
S Valentine			
S Calvert's Orange	July 20	July 27	July 20
Vedova			
Venoya			
Calk Cliff			
S Capricorn			
Luminary			
Scepter			
S Red Star	July 20	July 27	July 27
Criterion			
Personality			
Humdinger			
S Golden Favourite			
S Cossack			
S Loubens			
S Wilson's White	July 20	July 27	Aug. 3
S Poitevine Supreme			
Barbara Fuller			
Queen's Lace	July 27	1st Aug. 3	Aug. 3
Gold Lace		2nd Aug. 24	
Snow Crystal			
Ice Follies			
Little America			
S Ind. Varieties	July 27	Aug. 3	July 27
S Vulcan			
S Woking Scarlet			
Frolic			
S Pink Deluxe			
S Quicksilver			
Snowclad			
Luna			
Sundial			
Resolute			
S Blue Ribbon	July 27	Aug. 3	Aug. 3
Bridesmaid			
Queen of Pinks			
S Malou			
S Mrs. Wolfe			
S Mrs. Palmero			
S Bronze Palmero			
Alex Colson	Aug. 3	Aug. 10	Aug. 3
Royal Bronze			

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM OCTOBER 12, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaillon Deluxe S Calverts' Gold Charm	July 20	None	July 27	July 27
S Oregon S Oregon Trail S Yellow Delaware S Delaware S Sandrock Mermaid	July 20	None	July 27	Aug. 3
S Valentine S Calvert's Orange Vedova Venoya	July 27	None	Aug. 3	July 27
Calk Cliff S Capricorn Luminary Scepter S Red Star Criterion Personality Humdinger S Golden Favourite S Cossack S Loubens	July 27	None	Aug. 3	Aug. 3
S Wilson's White S Poitevine Supreme Barbara Fuller	July 27	July 27 - Aug. 10	Aug. 3	Aug. 10
Queen's Lace Gold Lace	Aug. 3	None	1st Aug. 10 2nd Aug. 31	Aug. 10
Snow Crystal Ice Follies Little America S Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Aug. 3	None	Aug. 10	Aug. 3
S Quicksilver Snowclad Luna Sundial Resolute S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Aug. 3	Aug. 3 - Aug. 10	Aug. 10	Aug. 10
Alex Colson Royal Bronze	Aug. 10	None	Aug. 17	Aug. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM OCTOBER 19, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe S Calvert's Gold Charm	July 27	None	Aug. 3	Aug. 3
S Oregon S Oregon Trail S Yellow Delaware S Delaware S Sandrock Mermaid	July 27	July 27 - Aug. 10	Aug. 3	Aug. 10
S Valentine S Calvert's Orange Vedova Venoya	Aug. 3	None	Aug. 10	Aug. 3
Calk Cliff Luminary Scepter S Red Star Criterion Personality Humdinger S Golden Favourite S Cossack S Loubens	Aug. 3	Aug. 3 - Aug. 10	Aug. 10	Aug. 10
S Wilson's White S Poitevine Supreme Barbara Fuller	Aug. 3	Aug. 3 - Aug. 17	Aug. 10	Aug. 17
Queen's Lace Gold Lace	Aug. 10	Aug. 10 - Aug. 17	1st Aug. 17 2nd Sept. 7	Aug. 17
Snow Crystal Ice Follies Little America S Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Aug. 10	None	Aug. 17	Aug. 10
S Quicksilver Snowclad Luna Sundial Resolute S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Aug. 10	Aug. 10 - Aug. 17	Aug. 17	Aug. 17
Alex Colson Royal Bronze	Aug. 17	None	Aug. 24	Aug. 17

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM OCTOBER 26, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe S Calvert's Gold Charm	Aug. 3	None	Aug. 10	Aug. 10
S Oregon S Oregon Trail S Yellow Delaware S Delaware S Sandrock Mermaid	Aug. 3	Aug. 3 - Aug. 17	Aug. 10	Aug. 17
S Valentine S Calvert's Orange Vedova Venoya	Aug. 10	None	Aug. 17	Aug. 10
Calk Cliff Luminary Scepter S Red Star Criterion Personality Humdinger S Golden Favourite S Cossack S Loubens	Aug. 10	Aug. 10 - Aug. 17	Aug. 17	Aug. 17
S Wilson's White S Poitevine Supreme Barbara Fuller	Aug. 10	Aug. 10 - Aug. 24	Aug. 17	Aug. 24
Queen's Lace Gold Lace	Aug. 17	Aug. 17 - Aug. 24	1st Aug. 24 2nd Sept. 14	Aug. 24
Snow Crystal Ice Follies Little America S Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Aug. 17	None	Aug. 24	Aug. 17
S Quicksilver Snowclad Luna Sundial Resolute S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Aug. 17	Aug. 17 - Aug. 24	Aug. 24	Aug. 24
Alex Colson Royal Bronze	Aug. 24	None	Aug. 31	Aug. 24

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM NOVEMBER 2, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe S Calvert's Gold Charm	Aug. 10	Aug. 10 - Aug. 17	Aug. 17	Aug. 17
S Oregon S Oregon Trail S Yellow Delaware S Delaware Mermaid	Aug. 10	Aug. 10 - Aug. 24	Aug. 17	Aug. 24
S Valentine S Calvert's Orange Vedova Venoya	Aug. 17	None	Aug. 24	Aug. 17
S Chalk Cliff S Red Star Criterion Personality Humdinger S Cossack S Loubens	Aug. 17	Aug. 17 - Aug. 24	Aug. 24	Aug. 24
S Wilson's White S Poitevine Supreme Barbara Fuller	Aug. 17	Aug. 17 - Aug. 31	Aug. 24	Aug. 31
Queen's Lace Gold Lace	Aug. 24	Aug. 24 - Aug. 31	1st Aug. 31 2nd Sept. 21	Aug. 31
S Snow Crystal S Ice Follies S Little America S Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Aug. 24	None	Aug. 31	Aug. 24
S Quicksilver S Snowclad Luna Sundial S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Aug. 24	Aug. 24 - Aug. 31	Aug. 31	Aug. 31
Alex Colson Royal Bronze	Aug. 31	None	Sept. 7	Aug. 31

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM NOVEMBER 9, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe S Calvert's Gold Charm	Aug. 17	Aug. 17 - Aug. 24	Aug. 24	Aug. 24
S Oregon S Oregon Trail S Yellow Delaware S Delaware Mermaid	Aug. 17	Aug. 17 - Aug. 31	Aug. 24	Aug. 31
S Valentine S Calvert's Orange Vedova Venoya	Aug. 24	None	Aug. 31	Aug. 24
Chalk Cliff S Red Star Criterion Personality Humdinger S Cossack S Loubens	Aug. 24	Aug. 24 - Aug. 31	Aug. 31	Aug. 31
S Wilson's White S Poitevine Supreme Barbara Fuller	Aug. 24	Aug. 24 - Sept. 7	Aug. 31	Sept. 7
Queen's Lace Gold Lace	Aug. 31	Aug. 31 - Sept. 7	1st Sept. 7 2nd Sept. 28	Sept. 7
Snow Crystal Ice Follies Little America S Ind. Varities S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Aug. 31	None	Sept. 7	Aug. 31
S Quicksilver Snowclad Luna Sundial S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Aug. 31	Aug. 31 - Sept. 7	Sept. 7	Sept. 7
Alex Colson Royal Bronze	Sept. 7	None	Sept. 14	Sept. 7

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM NOVEMBER 16, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnafton Deluxe S Calvert's Gold Charm	Aug. 24	Aug. 24 - Aug. 31	Aug. 31	Aug. 31
S Oregon S Oregon Trail S Yellow Delaware S Delaware Mermaid	Aug. 24	Aug. 24 - Sept. 7	Aug. 31	Sept. 7
S Valentine S Calvert's Orange Vedova Venoya	Aug. 31	None	Sept. 7	Aug. 31
Chalk Cliff S Red Star Criterion Personality Humdinger S Cossack S Leubens	Aug. 31	Aug. 31 - Sept. 9	Sept. 9	Sept. 9
S Wilson's White S Poitevine Supreme Barbara Fuller	Aug. 31	Aug. 31 - Sept. 16	Sept. 9	no
Queen's Lace Gold Lace	Sept. 7	Sept. 7 - Sept. 14	1st Sept. 14 2nd Oct. 12	no
Snow Crystal Ice Follies Little America S Ind. Varieties S Vulcan S Woking Scarlet Frolic S Pink Deluxe	Sept. 7	None	Sept. 14	Sept. 7
S Quicksilver Snowclad Luna Sundial S Blue Ribbon Bridesmaid Queen of Pinks S Malou S Mrs. Wolfe S Mrs. Palmero S Bronze Palmero	Sept. 7	Sept. 7 - Sept. 17	Sept. 17	Sept. 17
Alex Colson Royal Bronze	Sept. 14	None	Sept. 21	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM NOVEMBER 23, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Charm.....	Aug. 31	Aug. 31 - Sept. 9	Sept. 9	no
S Oregon..... S Yellow Delaware..... S Delaware..... S Mermaid.....	Aug. 31	Aug. 31 - Sept. 16	Sept. 9	no
S Valentine..... S Calvert's Orange.....	Sept. 7	None	Sept. 14	no
Chalk Cliff..... S Red Star..... S Criterion..... S Personality..... S Cossack..... S Loubens.....	Sept. 7	Sept. 7 - Sept. 17	Sept. 17	no
Queen's Lace..... Gold Lace.....	Sept. 14	Sept. 14 - Sept. 21	1st Sept. 21 2nd Oct. 19	no
S Snow Crystal..... S Ice Follies..... S Little America..... S Ind. Varieties..... S Vulcan..... S Working Scarlet..... S Frolic..... S Pink Deluxe.....	Sept. 14	None	Sept. 21	no
S Quicksilver..... S Snowclad..... S Blue Ribbon..... S Bridesmaid..... S Queen of Pinks..... S Malou..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero.....	Sept. 7	Sept. 7 - Sept. 19	Sept. 19	no

BLOOM NOVEMBER 30, 1959

Bonnaffon Deluxe..... Charm.....	Sept. 7	Sept. 7 - Sept. 16	Sept. 16	no
S Oregon..... S Yellow Delaware..... S Delaware..... S Mermaid.....	Sept. 7	Sept. 7 - Sept. 23	Sept. 16	no
S Valentine..... S Calvert's Orange.....	Sept. 14	None	Sept. 21	no
Chalk Cliff..... S Red Star..... S Criterion..... S Personality..... S Cossack..... S Loubens.....	Sept. 7	Sept. 7 - Sept. 19	Sept. 19	no
Queen's Lace..... Gold Lace.....	Sept. 21	Sept. 21 - Sept. 28	1st Sept. 28 2nd Oct. 26	no
S Snow Crystal..... S Ice Follies..... S Little America..... S Ind. Varieties..... S Vulcan..... S Working Scarlet..... S Frolic..... S Pink Deluxe.....	Sept. 14	Sept. 14 - Sept. 21	Sept. 28	no
S Quicksilver..... S Snowclad..... S Blue Ribbon..... S Bridesmaid..... S Queen of Pinks..... S Malou..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero.....	Sept. 14	Sept. 14 - Sept. 26	Sept. 26	no

Year-Round Pot Plant Schedule

BLOOM DECEMBER 7, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Charm.....	Sept. 7	Sept. 7 - Sept. 19	Sept. 19	no
S Oregon..... S Yellow Delaware..... S Delaware..... S Mermaid.....	Sept. 7	Sept. 7 - Sept. 26	Sept. 19	no
S Valentine..... S Calvert's Orange.....	Sept. 14	Sept. 14 - Sept. 19	Sept. 26	no
Chalk Cliff..... S Red Star..... S Criterion..... S Personality..... S Cossack..... S Loubens.....	Sept. 14	Sept. 14 - Sept. 26	Sept. 26	no
Queen's Lace..... Gold Lace.....	Sept. 28	Sept. 28 - Oct. 5	1st Oct. 5 2nd Nov. 2	no
S Snow Crystal..... S Ice Follies..... S Little America..... S Ind. Varieties..... S Vulcan..... S Woking Scarlet..... S Frolic..... S Pink Deluxe.....	Sept. 21	Sept. 21 - Sept. 28	Oct. 5	no
S Quicksilver..... S Blue Ribbon..... S Bridesmaid..... S Queen of Pinks..... S Malou..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero.....	Sept. 21	Sept. 21 - Oct. 3	Oct. 3	no

BLOOM DECEMBER 14, 1959

Bonnaffon Deluxe..... Charm.....	Sept. 14	Sept. 14 - Sept. 26	Sept. 26	no
S Oregon..... S Yellow Delaware..... S Delaware..... S Mermaid.....	Sept. 14	Sept. 14 - Oct. 3	Sept. 26	no
S Valentine..... S Calvert's Orange.....	Sept. 21	Sept. 21 - Sept. 28	Oct. 5	no
Chalk Cliff..... S Red Star..... S Criterion..... S Personality..... S Cossack..... S Loubens.....	Sept. 21	Sept. 21 - Oct. 3	Oct. 3	no
Queen's Lace..... Gold Lace.....	Oct. 5	Oct. 5 - Oct. 12	1st Oct. 12 2nd Nov. 9	no
S Snow Crystal..... S Ice Follies..... S Little America..... S Ind. Varieties..... S Vulcan..... S Woking Scarlet..... S Frolic..... S Pink Deluxe.....	Sept. 28	Sept. 28 - Oct. 5	Oct. 12	no
S Quicksilver..... S Blue Ribbon..... S Bridesmaid..... S Queen of Pinks..... S Malou..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero.....	Sept. 28	Sept. 28 - Oct. 12	Oct. 12	no

S — For Single Stem Pots — Plant and Shade on Pinch Dates

Year-Round Pot Plant Schedule

BLOOM DECEMBER 21, 1959

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe..... Charm.....	Sept. 21	Sept. 21 - Oct. 3	Oct. 3	no
S Oregon..... S Yellow Delaware..... S Delaware..... Mermaid.....	Sept. 21	Sept. 21 - Oct. 10	Oct. 3	no
S Valentine..... S Calvert's Orange.....	Sept. 28	Sept. 28 - Oct. 5	Oct. 12	no
Chalk Cliff..... S Red Star..... Criterion..... Personality..... S Cossack..... S Loubens.....	Sept. 28	Sept. 28 - Oct. 12	Oct. 12	no
Queen's Lace..... Gold Lace.....	Oct. 5	Oct. 5 - Oct. 19	1st Oct. 19 2nd Nov. 16	no
Snow Crystal..... Ice Follies..... Little America..... S Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Oct. 5	Oct. 5 - Oct. 12	Oct. 19	no
S Blue Ribbon..... Bridesmaid..... Queen of Pinks..... S Malou..... S Mrs. Wolfe..... S Mrs. Palmero..... S Bronze Palmero.....	Oct. 5	Oct. 5 - Oct. 19	Oct. 19	no

BLOOM DECEMBER 28, 1959

Bonnaffon Deluxe..... Charm.....	Sept. 28	Sept. 28 - Oct. 12	Oct. 12	no
S Oregon..... S Yellow Delaware..... S Delaware..... Mermaid.....	Sept. 28	Sept. 28 - Oct. 19	Oct. 12	no
S Valentine..... S Calvert's Orange.....	Oct. 5	Oct. 5 - Oct. 12	Oct. 19	no
Chalk Cliff..... S Red Star..... Criterion..... Personality..... S Cossack..... S Loubens.....	Oct. 5	Oct. 5 - Oct. 19	Oct. 19	no
Queen's Lace..... Gold Lace.....	Oct. 12	Oct. 12 - Oct. 26	1st Oct. 26 2nd Nov. 23	no
Snow Crystal..... Ice Follies..... Little America..... S Ind. Varieties..... S Vulcan..... S Working Scarlet..... Frolic..... S Pink Deluxe.....	Oct. 12	Oct. 12 - Oct. 19	Oct. 26	no
S Blue Ribbon..... Bridesmaid..... Queen of Pinks..... S Malou..... S Mrs. Wolfe.....	Oct. 12	Oct. 12 - Oct. 26	Oct. 26	no

Fast Disbuds and Fast Sprays

Varieties suitable for this program include not only a number of popular standard types such as the Indianapolis group, but also numerous large flowered pompon, single, decoratives, and anemone types, which, when disbudded to one flower, result in three to four inch blooms, this being the size range that is generally sought for. Stem lengths generally range from 24 to 30 inches.

Why are They Becoming Popular?

First of all, they are distinctively beautiful and versatile in their use. The chrysanthemum, as is known in European floriculture, is devoted exclusively to these intermediate to large disbuds. It is thought that this method of culture partly resulted because the greatest percentage of flowers produced are purchased directly for home use. Thus, they can justifiably be called "Home-size-mums" with great future potential as we on the North American continent look forward to an expansion in our present home markets. The retail designer will use them to the same advantage as he does a carnation or a snapdragon because of their individuality in arrangement, but will favor the disbudded mum because of its rigid durability both in handling and in keeping qualities.

Efficient Croppers and Money Makers for the Producer

The schedule allows for approximately 3 and 1/3 crops to be produced on a given bench area within a 52-week period which will produce a total of 36 to 40 individual flowers per sq. ft. As markets are both developed and educated to absorb these shorter stemmed disbuds, even greater efficiencies in reducing total crop time will be possible.

How are They Grown?

SPACING—Allowing a minimum of 12 sq. inches for each flowering stem during the higher light periods of the year ranging to a maximum of 15 to 18 sq. inches per stem during the lowest and poorest light periods, has been found to be sufficiently adequate to produce this crop.

Since this crop is to be pinched, the recommendation is to plant either 4" x 6" apart and prune each plant to two stems or plant 6" x 6" and prune each plant to three stems.

Optimum grade uniformity is generally achieved by permitting only two stems to remain on each plant. This procedure is specifically recommended when the

large standard types of mums (Indianapolis, etc.) are to be grown in this fast schedule, whereas many of the intermediate type disbud varieties will readily support three stems per plant. Either method of handling will provide the same total production per given sq. ft. of bench area.



Market Pack of Fast Disbud

RECOMMENDED SPACING

Summer Flowering	6" x 4"	Two stems per plant
Spring & Fall	6" x 5"	Two stems per plant
Winter Flowering	6" x 6"	Two stems per plant

PRUNING—Selecting the two or three most uniformly vigorous shoots on each pinched plant and removing the remaining or extra breaks should be done at the earliest possible time. If growth is freely active, this pruning operation can be done 10 to 14 days after the pinch. Careless delay in the pruning operation will shorten the height of the crop below that which is normally possible with the given schedule.

DISBUDDING—Much like the pruning operation. In order to achieve maximum flower development and size, select the one flowering bud, usually the terminal bud, early, whenever the side buds are firm and can be rolled or snapped off easily.

CULTURAL POINTERS—The principles of growing Fast Disbuds as related to soils, planting, fertilizing, temperature, watering, insect and disease control, are essentially the same as are recommended and required in the production of a regular scheduled crop of either pompons or standards.

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
January 4, 1960	Aug. 31	Sept. 21	Aug. 31—Oct. 12 Aug. 31—Oct. 19 Aug. 31—Oct. 26	no no no	12 Week 11 Week 10 Week
January 11, 1960	Sept. 7	Sept. 28	Sept. 7—Oct. 19 Sept. 7—Oct. 26 Sept. 7—Nov. 2	no no no	12 Week 11 Week 10 Week
January 18, 1960	Sept. 14	Oct. 5	Sept. 14—Oct. 26 Sept. 14—Nov. 2 Sept. 14—Nov. 9	no no no	12 Week 11 Week 10 Week
January 25, 1960	Sept. 21	Oct. 12	Sept. 21—Nov. 2 Sept. 21—Nov. 9 Sept. 21—Nov. 16	no no no	12 Week 11 Week 10 Week
February 1, 1960	Sept. 28	Oct. 19	Sept. 28—Nov. 9 Sept. 28—Nov. 16 Sept. 28—Nov. 23	no no no	12 Week 11 Week 10 Week
February 8, 1960	Oct. 5	Oct. 26	Oct. 5—Nov. 16 Oct. 5—Nov. 23 Oct. 5—Nov. 30	no no no	12 Week 11 Week 10 Week
February 15, 1960	Oct. 12	Nov. 2	Oct. 12—Nov. 23 Oct. 12—Nov. 30 Oct. 12—Dec. 7	no no no	12 Week 11 Week 10 Week
February 22, 1960	Oct. 19	Nov. 9	Oct. 19—Nov. 30 Oct. 19—Dec. 7 Oct. 19—Dec. 14	no no no	12 Week 11 Week 10 Week
February 29, 1960	Oct. 26	Nov. 16	Oct. 26—Dec. 7 Oct. 26—Dec. 14 Oct. 26—Dec. 21	no no no	12 Week 11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week
WHITE	White Peter John Champ Illini Glacier	White Norma Marketeer Ermine John Baumann Surfside	Ind. White Imp. Ind. White Ind. No. 3 White
YELLOW	Yellow Peter John Yellow Glory	Shane Suzanne Miller Yellow Marketeer	Ind. Yellow Imp. Ind. Yellow Luyona
BRONZE & RED	Bronze Peter John Forever Amber Red Empress	Valentine Olnura	Ind. Bronze Dark Ind. Bronze
PINK	Pink Peter John Orchid Valencia Empress	Dark Norma Vedova Venoya Thanks. Pink Ed Seidewitz	Ind. Pink Southdown Pink Plum Cadenza Laughter

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
March 7, 1960	Nov. 2	Nov. 23	Nov. 2 —Dec. 21 Nov. 2 —Dec. 28 Nov. 2 —Jan. 4	no no no	11 week 10 week 9 week
March 14, 1960	Nov. 9	Dec. 7	Nov. 9 —Dec. 28 Nov. 9 —Jan. 4 Nov. 9 —Jan. 11	no no no	11 week 10 week 9 week
March 21, 1960	Nov. 16	Dec. 14	Nov. 16—Jan. 4 Nov. 16—Jan. 11 Nov. 16—Jan. 18	no no no	11 week 10 week 9 week
March 28, 1960	Nov. 30	Dec. 28	Nov. 30—Jan. 11 Nov. 30—Jan. 18 Nov. 30—Jan. 25	no no no	11 week 10 week 9 week
April 4, 1960	Dec. 7	Jan. 4	Dec. 7 —Jan. 25 Dec. 7 —Feb. 1 Dec. 7 —Feb. 8	no no no	10 week 9 week 8 week
April 11, 1960	Dec. 21	Jan. 18	Dec. 21—Feb. 1 Dec. 21—Feb. 8 Dec. 21—Feb. 15	no no no	10 week 9 week 8 week
April 18, 1960	Dec. 28	Jan. 26	Dec. 28—Feb. 8 Dec. 28—Feb. 15 Dec. 28—Feb. 22	Mar. 21 Mar. 28 Apr. 4	10 week 9 week 8 week
April 27, 1959	Jan. 12	Feb. 9	Jan. 12—Feb. 16 Jan. 12—Feb. 23 Jan. 12—Mar. 2	Mar. 23 Mar. 30 Apr. 6	10 week 9 week 8 week

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	White Norma Marketeer Ermine John Baumann Surfside	Ind. White Imp. Ind. White Ind. No. 3 White	Queen's Lace Silver Bow Camille Baumann	
YELLOW	Shane Suzanne Miller Yellow Marketeer	Imp. Ind. Yellow Ind. Yellow Yellow Iceberg Chairman Gordon Wells	Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Sunburst Blazing Gold
BRONZE & RED	Valentine Olnura	Ind. Bronze Dark Ind. Bronze Daybreak	Duchess Ivanhoe	Amber Bright
PINK	Pioneer Vedova Venoya Thanks. Pink Ed Seidewitz	Ind. Pink Southdown Pink Cadenza Laughter Merriment	Blue Ribbon Bunbu	

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
May 4, 1959	Jan. 19	Feb. 16	Jan. 19—Feb. 23	Mar. 23	10 Week
			Jan. 19—Mar. 2	Mar. 30	9 Week
			Jan. 19—Mar. 9	Apr. 6	8 Week
May 11, 1959	Jan. 26	Feb. 23	Jan. 26—Mar. 2	Mar. 23	10 Week
			Jan. 26—Mar. 9	Mar. 30	9 Week
			Jan. 26—Mar. 16	Apr. 6	8 Week
May 18, 1959	Feb. 2	Feb. 23	Feb. 2—Mar. 9	Mar. 23	10 Week
			Feb. 2—Mar. 16	Mar. 30	9 Week
			Feb. 2—Mar. 23	Apr. 6	8 Week
May 25, 1959	Feb. 16	Mar. 9	Feb. 16—Mar. 16	Mar. 23	10 Week
			Feb. 16—Mar. 23	Mar. 30	9 Week
			Feb. 16—Mar. 30	Apr. 6	8 Week
June 1, 1959	Feb. 23	Mar. 16	Feb. 23—Mar. 23	Mar. 23	10 Week
			Feb. 23—Mar. 30	Mar. 30	9 Week
			Feb. 23—Apr. 6	Apr. 6	8 Week
June 8, 1959	Mar. 9	Mar. 30	Mar. 9—Mar. 30	Mar. 30	10 Week
			Mar. 9—Apr. 6	Apr. 6	9 Week
			Mar. 9—Apr. 13	Apr. 13	8 Week
June 15, 1959	Mar. 16	Apr. 6	Mar. 16—Apr. 6	Apr. 6	10 Week
			Mar. 16—Apr. 13	Apr. 13	9 Week
			Mar. 16—Apr. 20	Apr. 20	8 Week
June 22, 1959	Mar. 23	Apr. 13	Mar. 23—Apr. 13	Apr. 13	10 Week
			Mar. 23—Apr. 20	Apr. 20	9 Week
			Mar. 23—Apr. 27	Apr. 27	8 Week
June 29, 1959	Mar. 30	Apr. 20	Mar. 30—Apr. 20	Apr. 20	10 Week
			Mar. 30—Apr. 27	Apr. 27	9 Week
			Mar. 30—May 4	May 4	8 Week

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	Ind. White Imp. Ind. White Ind. No. 3 White Iceberg Ice Cream Ensign	Silver Bow Marblehead Moontide Queen's Lace Camille Baumann	Wh. Pink Chief
YELLOW	Imp. Ind. Yellow Ind. Cream Chairman Explorer Yellow Iceberg	Golden Herald Mecca Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Celestra Sunburst Blazing Gold
BRONZE & RED	Ind. Bronze Dark Ind. Bronze Nectarine Fred Yule	Resolute Dorothy Hyde Stuart Ogg Zylon Duchess Ivanhoe Fred Yule	Mayford's Triumph Amber Bright Mayford Titan
PINK	Ind. Pink Vanguard Southdown Pink Plum Laughter	Thomas Johnson Blue Ribbon Bunbu Mary Garden	

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
July 6, 1959	Apr. 6	Apr. 27	Apr. 6—Apr. 27	Apr. 27	10 Week
			Apr. 6—May 4	May 4	9 Week
			Apr. 6—May 11	May 11	8 Week
July 13, 1959	Apr. 13	May 4	Apr. 13—May 4	May 4	10 Week
			Apr. 13—May 11	May 11	9 Week
			Apr. 13—May 18	May 18	8 Week
July 20, 1959	Apr. 20	May 11	Apr. 20—May 11	May 11	10 Week
			Apr. 20—May 18	May 18	9 Week
			Apr. 20—May 25	May 25	8 Week
July 27, 1959	Apr. 27	May 18	Apr. 27—May 11	May 18	10 Week
			Apr. 27—May 18	May 25	9 Week
			Apr. 27—May 25	June 1	8 Week
August 3, 1959	May 4	May 18	no	May 25	10 Week
				June 1	9 Week
				June 8	8 Week
August 10, 1959	May 11	May 25	no	June 1	10 Week
				June 8	9 Week
				June 15	8 Week
August 17, 1959	May 18	June 1	no	June 8	10 Week
				June 15	9 Week
				June 22	8 Week
August 24, 1959	May 25	June 8	no	June 15	10 Week
				June 22	9 Week
				June 29	8 Week
August 31, 1959	June 1	June 15	no	June 22	10 Week
				June 29	9 Week
				July 6	8 Week

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
White	Ind. White Imp. Ind. White Ind. No. 3 White Sentinel Ice Cream Ensign	Silver Bow Marblehead Moonfide Queen's Lace Themesong White Mary Garden Camille Baumann	Wh. Pink Chief
Yellow	Imp. Ind. Yellow Ind. Cream Luxury	Golden Herald Yel. Marblehead Mecca Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Celestra Blazing Gold
BRONZE	Daybreak	Dorothy Hyde Zylon Fred Yule	Amber Bright
Pink	Vanguard Plum Laughter	Bunbu	

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	START SHADE	RESPONSE GROUP
September 7, 1959	June 8	June 22	June 29 July 6 July 13	10 Week 9 Week 8 Week
September 14, 1959	June 15	June 29	July 6 July 13 July 20	10 Week 9 Week 8 Week
September 21, 1959	June 22	July 6	July 13 July 20 July 27	10 Week 9 Week 8 Week
September 28, 1959	June 22	July 6	July 20 July 27 Aug. 3	10 Week 9 Week 8 Week
October 5, 1959	June 29	July 13	July 27 Aug. 3 Aug. 10	10 Week 9 Week 8 Week
October 12, 1959	July 6	July 20	July 27 Aug. 3 Aug. 10	11 Week 10 Week 9 Week
October 19, 1959	July 6	July 20	Aug. 3 Aug. 10 Aug. 17	11 Week 10 Week 9 Week
October 26, 1959	July 13	July 27	Aug. 10 Aug. 17 Aug. 24	11 Week 10 Week 9 Week

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	Marketeer John Baumann Surfside	Ind. White Imp. Ind. White Ind. No. 3 White Sentinel Iceberg Ice Cream Ensign	Silver Bow Marblehead Moonfide Queen's Lace Themesong Wh. Mary Garden Camille Baumann	White Pink Chief
YELLOW	Illini Goldilocks Yellow Marketeer Shane Sultan	Imp. Ind. Yellow Ind. Cream Explorer Luxury Yellow Iceberg	Golden Herald Yel. Marblehead Mecca Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Sunburst Celestra
BRONZE & RED	Valentine Illini War Paint Olnura	Ind. Bronze Dark Ind. Bronze Nectarine The Titan Daybreak	Resolute Dorothy Hyde Stuart Ogg Zylon Ivanhoe Fred Yule	Amber Bright
PINK	Pioneer Vedova Venoya Marion Breedon Rose Delight	Ind. Pink Vanguard Southdown Pink Plum Laughter	Thomas Johnson Bunbu Mary Garden	

Year-Round Fast Schedule

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
November 2, 1959	July 20	Aug. 3	no no	Aug. 17 no	11 Week 10 Week
November 9, 1959	July 20	Aug. 3	no Aug. 3 —Aug. 31	Aug. 24 no	11 Week 10 Week
November 16, 1959	July 27	Aug. 10	no no Aug. 3 —Sept. 7	Aug. 24 no no	12 Week 11 Week 10 Week
November 23, 1959	Aug. 3	Aug. 17	no Aug. 10—Sept. 7 Aug. 3 —Sept. 14	no no no	12 Week 11 Week 10 Week
November 30, 1959	Aug. 10	Aug. 24	Aug. 17—Sept. 7 Aug. 10—Sept. 14 Aug. 10—Sept. 21	no no no	12 Week 11 Week 10 Week
Devember 7, 1959	Aug. 10	Aug. 24	Aug. 17—Sept. 14 Aug. 10—Sept. 21 Aug. 10—Sept. 28	no no no	12 Week 11 Week 10 Week
December 14, 1959	Aug. 17	Sept. 7	Aug. 17—Sept. 21 Aug. 17—Sept. 28 Aug. 17—Oct. 5	no no no	12 Week 11 Week 10 Week
December 21, 1959	Aug. 17	Sept. 7	Aug. 17—Sept. 28 Aug. 17—Oct. 5 Aug. 17—Oct. 12	no no no	12 Week 11 Week 10 Week
December 28, 1959	Aug. 24	Sept. 14	Aug. 24—Oct. 5 Aug. 24—Oct. 12 Aug. 24—Oct. 19	no no no	12 Week 11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week
WHITE	White Peter John Champ White Valencia Illini Glacier December Glory	White Norma Marketeer Ermine John Baumann Surfside	Ind. White Imp. Ind. White Ind. No. 3 White Ensign
YELLOW	Yellow Peter John Yellow Glory Goldsmith	Shane Susanne Miller Yellow Marketeer	Imp. Ind. Yellow Ind. Cream Nightingale Gordon Wells
BRONZE & RED	Bronze Goldsmith Forever Amber Bronze Peter John Apricot Valencia	Valentine Illini War Paint Olnura	Ind. Bronze Dark Ind. Bronze
PINK	Pink Peter John Orchid Valencia Empress	Dark Norma Vedova Venoya Thanks. Pink Ed Seidewitz	Ind. Pink Southdown Pink Plum Cadenza Laughter

Better Chrysanthemums

CUTTINGS

The cuttings you receive are produced for direct planting. They are of excellent quality, properly rooted. These cuttings all have a pedigree record as to their productiveness and freedom from diseases. Each variety is increased from single plant selections. This contributes to more uniform growth and flowering.

Handling Cuttings

The cuttings you receive have been propagated in a material containing some organic matter which naturally has some plant food. Consequently these cuttings can be planted directly into the final location. Ordinarily they will not require shading, but if they have been several days in transit and have softened up some, or if they are planted during warm, bright weather, shading with aster cloth or paper is advisable. Under no circumstances leave the covering on the plants during dull weather or at night. It is well to syringe the plants frequently until they stand up and are showing signs of growth. Some evidence shows that watering with a starter solution (weak nutrient solution) within 48 hours after planting will speed up the growth.

Deliveries

With the advent of the time pinch and the precision method of culture, it is necessary to have your cuttings arrive at a definite date. To insure proper delivery, you must plan your cutting requirements months in advance of the date wanted. We would appreciate it if you could let us know your requirements so that our propagator can plan his growing of stock plants and cuttings even more systematically than he does.

To facilitate deliveries, cuttings will be shipped on Monday and Tuesday of each week. However, we will gladly make shipment on Friday or Saturday if specifically requested and provided the order is received one month prior to the required shipping date.

Delays

With the reduced delivery schedule of the Railway Express Agency, there may be delays in delivering your shipments. Chrysanthemum cuttings can be injured from cold as well as being too long in transit. If the cuttings are slightly wilted, they should be immersed in water for a short period and then planted. They will react perfectly to such treatment. If the cuttings have been slightly frozen, placing them in a cool room and thawing them out gradually, or placing them in a pail of cool water to take the frost out will bring them through so that they will do just as well as cuttings that have had nothing happen to them. Of course, if stock is badly frozen, or if long delays have occurred so that the cuttings are heated, yellow or rotted, you should file a claim at once with the express company.

Air Freight

We have been very well satisfied with the use of Air Freight to deliver rooted cuttings this past season. Customers who are close to an airport are naturally served better than those who have to have their shipment reconsigned via Railway Express. If you plan to use air freight, you should have your telephone number appear on all shipping labels.



Well Rooted Cuttings are Grown in Air Conditioned Greenhouses

Cultural Pointers

SOILS

Maintain an open, well-aerated soil that drains well in addition to having some moisture retention capacity. Periodic additions of organic matter to greenhouse soils has become a necessary practice for maintaining these desired properties that are associated with good soil management. The reason for the great care in soil preparation is to permit penetration of water and a uniform supply of fertilizer. If water remains on the surface of your soil for more than a few moments after watering, your soil is not of good structure.

When light is a limiting factor, the chrysanthemum plant is much more sensitive to overwatering and to soluble salt content than at any other period of the year. We continue to see marked improvement and benefits when sterilization is arranged to just precede the planting for the winter crops.

Steam Sterilization

Steam sterilization has become an integrated part of good soil management. In the past, steaming greenhouse soils once each year was thought to be adequate, but year-round producers of chrysanthemums have found that steam sterilization before each crop pays off with better quality and greater productivity. Steaming not only improves soil aggregation, but does produce magic-like effects upon growth where a continuous one-crop system is practiced.

Chemical Sterilization

If steam is not available chemical sterilization should be used. A chemical which has proven its worth is **Larvacide**. This material must be used when the greenhouses are empty to avoid injury to adjoining crops. The soil temperature should be at least 60 degrees or higher. When used properly you can expect favorable control of insect, diseases and weed seeds. **Dowfume MC 2** is a combination of Methyl Bromide with a small percentage of Chloropicrin. This too should be applied similar to Larvacide and will give fair control of diseases such as those associated with this crop. **Vapam** is easy to apply and will give good control of weed seeds, nematodes and many fungi.

Soil Management

Soils vary a great deal over the country, and yet many good crops of chrysanthemums are grown on all types of soil. Soil itself is not the most important factor, but soil management is of extreme importance. In considering the management of soil, the following steps are suggested:

1. Apply a quarter of the volume of manure, peat or other organic substitute once a year, usually just before steam sterilization. Rototill organic matter into the soil. When growing on ground beds, watch the tilling so that no impervious layer is formed which will later cause poor drainage.

2. Steam sterilize the soil so that the coolest point is heated to 180 degrees F. for 30 minutes. Sterilize before each crop.

3. Test soil for acidity, nitrates, phosphates, potassium and soluble salts and make corrections before planting.

4. Add several bushels of granular peat per 100 sq. ft. of area before planting and working into the top inch of soil.

5. Plant immediately after the soil cools. Waiting a week or two will increase the soluble salts into a dangerous concentration.

6. Water heavily after planting so that the soil is firmed around the roots of the cutting. Water the plants with a half strength liquid fertilizer immediately after the first watering. Continue to water heavily until the plants have become well established.

7. Maintain the following **Spurway** nutrient levels:

Nitrate Nitrogen	10-25 p.p.m.
Phosphorus	5-10 p.p.m.
Potassium	20-40 p.p.m.
Calcium	200-250 p.p.m.
pH	6.0-7.0
Solubridge reading (1-5 dilution)	40 or lower

8. Apply a complete fertilizer at time of bud initiation. Heavy watering and frequent light fertilizing will make chrysanthemums grow.



*Uniform Growth Is The Result of Good
Soil Management*

Cultural Pointers

FERTILIZERS

Soil structure is the key to soil fertility. The response of chrysanthemums to fertilization depends upon a favorable soil structure. It is known that plants require nutrients, water and air for growth. Good soil structure will provide proper air and water relationships. Therefore, it behooves us to give proper attention to the soil before starting the crop. Good open soil is a necessity.

Feeding

Chrysanthemums do much better right from the start if the soil is not too rich. Very often this crop will start off faster in new soil as compared to old soil that has been sterilized just because of the lower nutrient level in new soil. When using new soil, apply 5 pounds of superphosphate per 100 sq. ft. of area, plus a liberal application of manure before planting. Phosphorus moves slowly within the soil mixture. It should always be added before the crop is benched so that it may be mixed thoroughly into the soil. Liquid feeding with water-soluble fertilizers is fast becoming the popular method of applying fertilizer. Water soluble fertilizers are available in many different analyses and therefore you can apply the fertilizer your soil requires. Many growers are feeding soluble fertilizers through their automatic watering systems. Remember to apply weaker solutions of fertilizer more frequently rather than heavy doses less frequently. When using complete fertilizers in dry form we usually figure on using two applications at 2 pounds per 100 sq. ft. of area starting shortly after the plants have started to grow and ending when the buds are visible. **Remember that the plant is the best guide to fertilizer requirements and that more mums are ruined by overfeeding than by nutrient deficiencies.**

Levels of Nutrition

When using sterilized soil, the best recommendations to follow would be to analyze your soil from time to time. We have found that when the following Spurway nutrient levels are kept, good crops are the result. Nitrate nitrogen should be 10-25 p.p.m.; phosphorus 5-10 p.p.m.; potassium 20-40 p.p.m. and calcium near 200 p.p.m. To increase the nitrate level, feed one pound of ammonium sulfate per 100 sq. ft. of area, and to bring up the potassium, apply muriate of potash not to exceed 1 pound per 100 sq. ft. If phosphorus is needed, apply mono-calcium phosphate at the rate of 1 pound per 100 sq. ft.

A liberal application of calcium sulfate (gypsum), 5 pounds per 100 sq. ft., after steam sterilization will prevent injury to young roots. High phosphorus also reduces toxicity after sterilization.

In the cooler weather and shorter days of September, omit the nitrogen if the plants are growing freely. The mum assimilates more phosphorus and potassium during the time of bud initiation. Therefore, it is desirable to apply a complete fertilizer shortly after the buds are visible.

Soluble Salts

Soluble salts are chemical compounds consisting of an acid part (ion) and a basic part (ion). For example, common table salt, sodium chloride, consists of one ion of chloride and one of sodium. Chloride is an acid-forming ion, and sodium a basic or alkali-forming ion. The two combine in chemically equivalent quantities to form a neutral salt. Other common acidic ions are sulfate, nitrate, bicarbonate and phosphate. Other common basic ions are calcium, magnesium, potassium and ammonium. Any basic ion may combine with any acidic ion giving rise to a great variety of salts.

All plant nutrients which are absorbed by plants from the soil or from culture solutions are absorbed in the form of salts or their constituent ions. All organic materials become "mineralized" through decay processes, and the nutrients in them are converted into salts before being absorbed by plants. Some salts contain plant nutrients and are beneficial in the small quantities required for plant growth. Others contain no nutrients. All salts are harmful beyond the small quantity required for plant growth. A little is bad, more is worse, up to the point where plants will be killed. Salts are found in most water and are applied as fertilizer. Improper watering may permit a concentration into the harmful range. Instruments called Wheatstone's bridges are available which measure total soluble salts in terms of electrical conductivity or conductance. Many laboratories of the Agricultural Extension Service are equipped with Solubridge instruments for use in assisting with soluble salt problems.

It has been found that **when planting rooted cuttings, the Solubridge readings should not be higher than 40**, while established plants do not withstand readings of 100 without showing some harmful effects. To remedy excess soluble salts, apply 2 to 3 gallons of water per sq. ft. and leach out this high salt content.



Gates Watering System

Cultural Pointers

NEWEST METHOD OF LIQUID FERTILIZING

The benefits of liquid fertilizing have been clearly pointed out in the last several years. Pot plant growers in particular are finding it possible to feed much more often than they could afford to under the old system of applying dry fertilizer. Most growers heartily endorse liquid feeding, but usually find that it is a cumbersome procedure. Up until now much of the equipment available to the trade for injecting or proportioning fertilizer into a water line has either been undependable, too complicated, or too costly. The FERT-O-JECT is the first reasonably priced unit designed to inject fertilizers into a water line without cutting the water pressure. This unit, designed and developed expressly for work with fertilizers, is precision built, yet any grower can tear it down and reassemble it.

How Fert-O-Ject Works

Fertilizer is injected into the water line by **positive displacement** and does not use a diaphragm or complicated linkage. The FERT-O-JECT operates with an **Automatic Flow Rate Anticipator**. Regardless of the number of people watering or the volume of water being used, the correct amount of feed is injected into the system. The accuracy of the FERT-O-JECT is truly amazing. The unit automatically turns off when the watering is finished.

Growers throughout the country are liquid feeding very weakly every time they water. This system was advocated by W. D. Holley of Colorado A & M several years ago and many growers in the Colorado area have been feeding in this manner. This popular system has been spreading rapidly, with other universities and authorities recommending its use.

Method is Practical

Perhaps the statement that most clearly emphasizes the practicalness of feeding weakly with every watering is: "The rate a plant uses water is the best available measure of its fertilizer requirements". A plant is constantly using fertilizer so it is therefore feasible to assume it is right to feed it constantly. In the winter months, plants are watered less and consequently receive less feed. Cutting benches, shaded areas, and cooler crops receive less water and therefore less feed.

Major results are observed in nutrient levels after such a method of fertilizing — mainly soluble salts drop and other nutrient levels remain very constant.

The labor involved in applying and watering-in dry feed, while not a major item, can be eliminated and at the same time a more dependable and a more uniform application of fertilizer will result.

The switch from a weak fertilizer to clear water can be made by simply turning one water valve.

The fact that fertilizer stands in the water lines scares many growers, but the solution is so weak that water systems twenty years old are not affected when a new unit is installed.

Application Rates

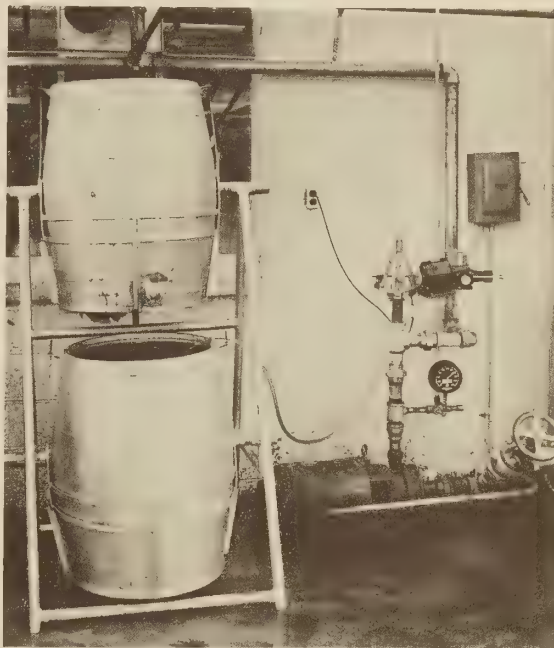
The amount of fertilizer used with the FERT-O-JECT will of course vary with the grower, locality, and crop, but many growers are putting 50 lbs. of ammonium nitrate and 30 lbs. of muriate of potash per barrel, which in

turn makes 10,000 gallons of weak fertilizer. All FERT-O-JECT, MODEL E's, are set at the factory at a proportion of 1:200. Any soluble fertilizer can be used with the system.

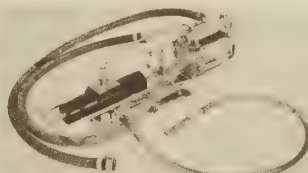
With the advent of satisfactory surface watering systems, liquid feeding regularly is even more important. These newer watering systems do such a satisfactory job of watering that more fertilizer is leached from the soil.

Growers have successfully grown chrysanthemums, roses, and carnations at the same range with one FERT-O-JECT and one fertilizer formula.

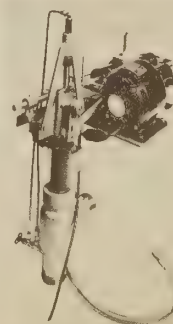
The simplicity and accuracy of the FERT-O-JECT, make it a popular piece of equipment with growers once they see it operate.



Fertilizer injector set up which injects liquid fertilizer concentrate into water line.



(Above) Portable Fert-O-Ject, Model PR, for pot plant growers. Proportion 1:35. \$235 F.O.B. Whittier, Calif.



(Right) Fert-O-Ject, Model E, for permanent installation seen in the large photograph above. \$435 F.O.B. Whittier, Calif.

Cultural Pointers

PLANTING

Chrysanthemums grow equally as well on a raised bench or on a ground bed. The care is slightly different in that raised benches dry out more frequently during the summer and early fall months. It must be remembered that a good circulation of air is desirable, yet a direct draft is not advisable.

Planting Date

The proper date of planting will naturally vary according to when the crop is to bloom. For natural blooming we prefer to plant 3 or 4 weeks before the last pinching date. When flowering from August to October, we suggest you plant 3 weeks before the pinching date. In the year-round flowering schedule where no pinch is followed, we have given the advised planting dates in that schedule.

Planting Rooted Cuttings

Many florists are planting rooted cuttings directly into permanent locations. This not only reduces several handlings and production costs, but also produces a better-quality bloom. We fully realize that it is often an impossibility for all to treat their chrysanthemums this way. However, we have found that young, soft plants are superior to hard, woody plants. **Never plant cuttings any deeper than what they were in the propagating media; too deep will cause stem rot.** Water heavily after planting. If new white roots are not formed within the first 12 hours, something is not quite right.

Single-Stem or No-Pinch Method

Cuttings are planted and allowed to grow without pinching. It is an essential practice if 3 crops a year are to be realized in the year-round flowering schedule. Where crops are planted from September 15 to February 1, no-pinch method produces a superior crop, whereas a pinched crop is weaker and of poorer quality.

Light Intensity

When planting rooted cuttings into their permanent position, it is necessary to shade the glass or to put aster cloth directly over the young plants until they are established. When shading the glass, be sure that the material is applied lightly.

When growing quality chrysanthemums, the higher the light intensity or the least amount of shade over the plants during the growing season, the better the quality of bloom. Shade on the glass is only there for the convenience of the grower and not for the require-

ments of the plant. For cloth houses, the amber Saran is superior to the green because of more light under the amber covering. Naturally the plants require more water when growing under high light intensities.

It is recommended to shade the plants when flowers are about one-half open to prevent them from sunburning. When growing standards, a good practice would be to stretch muslin directly over the open blooms. This not only prevents sunburning but also keeps the blooms free from dirt.

Distance of Planting

For good quality pompons, we prefer to plant 7x7 inches or 8x8 inches pinched once, and thin the shoots to 3 per plant. The outside rows will support one more stem than the center rows in the bed. Nothing is gained by planting at a closer distance. Light intensity should be high at the base of the plant for quality blooms, and if planted too closely, we have lost the factor which promotes quality. Large-flowered varieties are generally planted 8x8 inches or 7x7 inches; this also applies to disbud anemone and single varieties.

For single stem, no-pinch method pompons should be spaced 4x6 and standards 5x6. When further spacing is used the sprays of the pompons become too large. A slightly closer spacing is recommended when growing conditions are more favorable. Mini-mums (fast disbuds) should be spaced 4x6 in the summer flowering period and 6x6 in the winter.

PLANTING DISTANCE FOR NO-PINCH METHOD

Pompons	4 x 6 inches
Standards	5 x 6 inches
Fast-mums	4 x 6 inches (Summer)
Fast-mums	6 x 6 inches (Winter)



Applying Additional Light to an Entire House

Cultural Pointers

PINCHING

For a good number of years, the reason for pinching was to regulate the number of stems on the plant. In recent years, we have learned that in the case of pompons or singles the pinching determines the type of spray formation. With standards, pinching will determine the type of bud formation, whether it be a crown or terminal bud. Always pinch in the soft wood.

Pinching

Under the heading "Chrysanthemum Flowering Schedule" you will find the exact pinching dates for all planting dates. The table below will indicate the time to pinch after planting, according to various planting dates:

When planting **Nov. 15 to Feb. 14** allow **4 weeks** plant to pinch.

When planting **Feb. 15 to Nov. 14** allow **3 weeks** plant to pinch.

Time pinching standards will eliminate the formation of the crown bud and produce terminal buds which will in turn produce a much straighter flowering stem.

Pruning

Another important factor is to remove all shoots but 3 or 4 per plant. In a few instances only 2 shoots are allowed to mature. Allow more shoots to develop on the outside rows than on the center rows of a bed. When fewer breaks are selected, the planting distance should be closer.

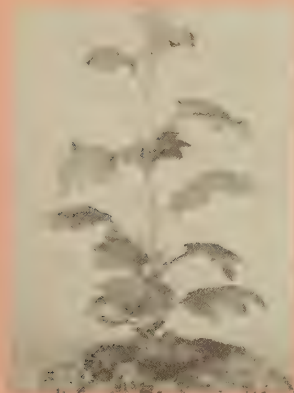
Standards are usually pinched once to induce breaks so that they may be grown 2 per plant. The strongest breaks are selected and all others removed. It is well to pinch on the date suggested in the general list. Careful observation has shown us that neckiness with some varieties is eliminated by pinching on the respective dates. Singles and anemones are usually grown 3 to 4 stems per plant.

Condition of Plant

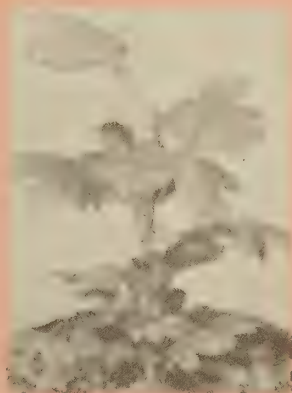
When pinching, remove only the soft growth, never cut into the woody stems as this will not produce the type of breaks you desire. It is our experience that it is best not to pinch until the plant has become well established in its permanent location. In all cases, it is better to have at least 8 to 10 inches of growth on the plants before pinching. (Photos below.)

If by chance you are delayed in planting, and your plants will be too tall, it is advisable to pinch early enough before benching so that the breaks will be several inches long at time of planting. Never pinch hard plants at the same time they are planted in the bench as a heavy loss may result. Better wait until plants are established and then pinch.

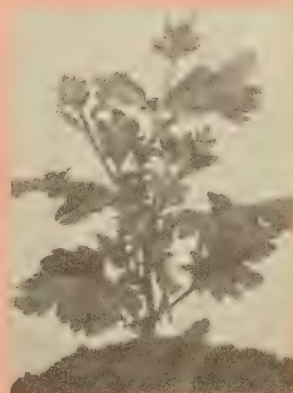
The pinching dates given after each week response will help you grow that variety to excellency. Remember that pinching is just one cultural point and will only function when all other cultural points are carried out properly.



Well-Established Young Plant



Top Several Inches Removed



Strong Breaks Resulting from Single Pinch

Cultural Pointers

DISBUDDING

Large-flowered varieties produce side shoots in the axils of the leaves which should be removed very close to the base at regular weekly intervals. Disbuds are handled the same as standards.

Taking Bud

Taking bud means allowing the flowering bud to remain and removing all others and applies to standards and disbuds. The chrysanthemum usually produces two distinct types of flowering buds — Crown and Terminal. The first bud produced is called the crown bud and is distinguished by being surrounded by other lateral leaf buds. The second is the terminal bud and is surrounded by several flower buds. If the plant is planted especially early, a second crown bud may appear. In appearance, this second crown bud is exactly the same as the first.

The procedure of "Taking Bud" depends very largely on the variety. Usually the safest rule to follow when growing for natural bloom is not to select a bud on early or midseason varieties before August 25. If bud is selected too early, a large percentage of the flowers will be crippled. Good common sense must be used to determine the proper selection of bud.

The formation of the crown bud usually does not take place when pinching plants on the date of their response group. When following "Time Pinch," select the first bud that appears. This will result in straight stems without the dogleg growth that appears when second bud is taken.

The final selection of bud should not be made when the cluster buds are too small as this will very likely cause injury to the stem near the bloom. Likewise, it is not advisable to delay selecting the bud too long. Some growers like to leave an alternate bud until they are certain that nothing will happen to the one finally selected.

Disbudded Spray

The procedure in growing disbudded sprays is to wait until the crown bud forms, then remove all but three vegetative shoots. Later, when terminal buds appear, disbud each shoot similarly to the normal disbudding of standards. When the blooms mature, there are three flowers on each spray. In singles and anemones, the size of the blooms will be a trifle smaller than when they are grown as one flower per stem. Raise 3 stems per plant, similar to straight disbud. Varieties such as Goldsmith, Valencia, etc., can be grown as disbudded sprays.

Disspray

Thinning down the number of buds on a spray of pompons is called "Disspray." During certain seasons

of growth many varieties of pompons produce too many buds per spray. If allowed to develop many of the flowers will stick and have poor quality. Thinning these buds to 4 or 5 buds will produce the highest quality sprays. Each variety will have to be studied to determine which buds to leave. Some varieties are improved when just the center bud is removed while with others the center bud plus 3 or 4 others near the top are left and the other suckers down the stem are removed.

Premature Budding

Bud initiation can occur anytime during the spring months, whenever your temperatures in the greenhouses are consistently 60 degrees Fahrenheit or above, and the days are short enough to initiate bud setting. These conditions can occur anytime up until May 1st depending upon the variety and the locality in which they are being grown. Some varieties, such as the garden varieties and early shading varieties, require very little short-day treatment, coupled with high temperatures to initiate buds. This same tendency to set bud readily is what makes these varieties desirable for early shading and garden work. In order to prevent this premature setting of buds, these same varieties should be placed where they can be given additional light during the early spring months. Use 60-watt bulbs spaced 4 feet apart and 24 inches above the plants. Three hours of light during the middle of the dark period will prevent budding completely if the minimum intensity is 8-foot candles. The same treatment on either end of the night might not be effective if you have a particularly cloudy period which gives you extremely short day.



Left: Terminal bud surrounded by flower buds.
Right: Terminal bud selected.

Cultural Pointers

WATERING

The knowledge of proper watering is essential to success. Chrysanthemums produce extremely heavy foliage, and a great deal of water is required at the roots. And under ordinary conditions of bench culture, overwatering would be difficult. When grown in beds, more care should be exercised in watering. Some soils look wet on the surface but are very dry several inches below.

When planting rooted cuttings directly into their permanent locations, it is essential to water thoroughly to set the soil around the plant roots. We suggest double watering again when the soil gets on the dry side. By this time, the plants are established and regular watering should be followed. Keep humidity in the house by wetting down bench and walks.

When light is a limiting factor, the chrysanthemum plant is much more sensitive to overwatering and to soluble salt content than at any other period of the year.

Steam sterilization causes the soil to become more granular, and capillary movement of water in it is much slower than in soils not steamed. Cuttings planted in it cannot obtain water readily, and for this reason should be kept more moist than in soils not sterilized.

Keep soil moisture high after the buds of the chrysanthemum show color. Moisture is very necessary in the development of the petals of the bloom. If the soil is kept a little too dry small poorly developed blooms will result.

Surface Watering

During the past several years, many labor-saving devices have been developed. Surface watering is one that will save many hours of hand watering your chrysanthemum crop. The Greco Automatic watering system, Gates System, Gro-Hose, the Skinner Superior

nozzle and the White Showers nozzle are outstanding methods in use today.

When installing surface watering, check your water supply and the capacity needed to irrigate your area. It is advisable to have an engineer figure out your requirements.

Leaching

Many greenhouse soils are excessively rich, and chrysanthemums will not thrive in such a medium. If this is the case, the remedy is leaching with water. After the soil is sterilized, it should be leached. Use a Skinner line and allow it to run for hours if necessary.



Pipe in Middle of Each Bed Has Full Circle Nozzles for Surface Watering

TEMPERATURE AND VENTILATION

For inter-connected units or crops at different stages of development the most efficient and effective temperature recommendations we can make are **cool 60° crops**. The house temperature is run at a straight 60° level night and day, cloudy or sunny. This is the lowest, safest minimum. It is the night temperature that counts. Eliminating fluctuation promotes steady, gradual growth. Keeping day temperatures down encourages more ventilation with corresponding reduction in relative humidity. This promotes stronger, heavier stems. On very bright days temperatures will frequently go higher but this should be due to radiant heat from the sun rather than convective greenhouse heat.

Temperatures much above 90 degrees will act as a prohibitor. When the night temperatures are in the 90's, bud development is hindered. This is especially true when black-clothing in the hottest part of the year. To reduce high temperatures under the black cloth, it is suggested that the sides of the cloth be lifted after sundown and dropped again before the sun rises in

the morning. During high temperature periods, it is much better to apply the cloth later in the afternoon and allow it to remain later in the morning.

Temperature has been responsible for peculiar types of flowers. The Indianapolis varieties develop quilled and flat blooms when allowed to develop under low temperatures. Many varieties will develop black centers in the flower when grown under high temperatures and low light intensity.

Pink and bronze colors just do not develop when the temperatures are high in the early stages of flower development. High light intensity and low temperatures are conducive to good color development. Many of the newer varieties will develop better color during hot summer months than the older varieties. The pinking of white varieties and the bronzing of yellow varieties results as the flowers develop at low temperatures.

Closed, humid houses make for soft spindly growth. **Good ventilation** is a must to reduce relative humidity and pays significant dividends when correctly handled.

Cultural Pointers

LATEST DEVELOPMENTS ON GREENHOUSE COOLING

The rapid manner in which millions of square feet of greenhouse have successfully been cooled in all parts of the country, clearly shows the outstanding significance of this new system in controlling greenhouse conditions.

With one year elapsed since the last **GLOECKNER CHRYSANTHEMUM MANUAL** first touched on greenhouse cooling, much has been learned about practical application in all areas of the United States. Up until this last summer most greenhouse cooling was done in areas of low humidity. Here compiled, as collected by your **GLOECKNER REPRESENTATIVES**, are various practical suggestions as told to them by growers from all parts of the country:

1. Baffles to properly direct air movement, prove of increasing importance. Polyethylene in greenhouse gables, from the gutter line to the ridge, is recommended every 30 feet when pulling lengthwise of the greenhouse. Likewise, when pulling across greenhouse, use baffles several feet up side wall running full length of greenhouse or suspended under the gutter several feet.

2. Distribution of water and wetness of pad cannot be overemphasized. Dry areas in the pad greatly reduce the pad effectiveness. Oftentimes pads are wet only on one side and this should be corrected. Pads are sometimes too thick. One should be able to barely see through a pad when standing with the face against pad.

3. Keep pads free from dust, dirt, cottonwood seed, and accumulated salt from the water. Weekly washing down with a strong rose syringe will keep pads operating efficiently.

4. Growers in areas of high humidity have learned to withhold water from the pad at night while still circulating air. This eliminates any condensation of moisture that normally occurs.

5. Feeding programs have been greatly increased under air conditioning. Denver growers in some cases reporting they have doubled rate of feed.

6. A light shade on greenhouse roof is still recommended by most growers who were used to shading blooming stock. A light shade not only increased flower size under air conditioning, but also improved color. With cooler greenhouse temperatures, a light shade does not seem to lower production, but does improve quality.

7. Cheese cloth that has been sprayed with an insecticide can be suspended several feet from and enclosing the pad. This impregnated cloth not only will lower thrip infestation, but will filter out cottonwood seeds and other flying type seeds and will be much easier to keep clean than the pad.

8. Wind breaks have been suggested for growers who occasionally have strong winds blowing directly into fans. By erecting a barrier 10 to 15 feet from the fan, much of the direct force of the wind can be eliminated.

9. The use of a detergent as an additive to the water has in many areas improved the job of wetting. Also copper sulfate when added to the sump will retard pad rot. Small amounts are effective. One cup per 50 gallon sump per week will be adequate.

Greenhouse cooling by fan and pad method WILL NOT:

1. Cause more disease problems, but will ease the situation.

2. Be restricted to low humidity areas, but eventually will be used in all areas.

3. Detract from the keeping quality of flowers.

4. Be too costly to operate.

Combination systems, using both the fans and high pressure mist have been used in several localities this summer, but it is too early to tell whether this system will be practical. Work done along these lines to date is encouraging.

Cost figures have ranged from 12 cents per square foot to 40 cents, depending on how elaborate the job.



Excellent Summer Crops in Air Cooled Greenhouses

Cultural Pointers

Blindness

Blindness is associated with temperature. When plants are grown below 50 to 55 degrees during the bud initiation period, many varieties will produce blind growth. In "Year-Round Flowering" we have found that chrysanthemums should be grown in a 60-degree temperature to insure good bud development. However, there are some varieties which require a higher temperature, and there are likewise varieties that will initiate their buds at a lower temperature; but it is safe to recommend a 60-degree temperature.

Petal Burn

When blooming chrysanthemums during high temperatures and high light intensity, it is advisable to cover the beds with a cheesecloth stretched about 18 inches above the top of the developing blooms. This covering will also help keep dirt off the open blooms. Sunburn sometimes is confused with flower ray blight, which is caused by Botrytis. Botrytis is more abundant during periods of high humidity and low temperatures. Ray blight can be controlled by spraying with **Parzate** when the color shows and then repeating the application every 5 days.

Adequate moisture at the roots will help prevent petal burn during the hot summer days.

Cloth Houses

Much has been written about the construction and care of the cloth house. It seems that this subject is well taken care of, although there are a few new ideas that should be mentioned.

To grow quality stock, it is necessary to use some type of covering such as aster cloth, onion bag or Saran. Saran plastic shade cloth woven from flat, elliptical yarn is now available to give varying percentages of shade. Cloth can be obtained that will cast 46% to 90% of shade. The cloth that casts 46% shade is recommended for chrysanthemum culture. Saran will outlive copper screening.

Plastic Houses

Many growers are erecting plastic houses used for the production of standard and pompon chrysanthemums. The lower cost of erection is the attractive feature. Installing the wet pad and fan system eliminates the costly conventional greenhouse ventilators. The usual width is 18 to 20 feet. The cost of erecting a plastic house is around 25-50 cents per square foot when the 4 mil polyethylene plastic is used. More durable plastics will raise the cost.

Shipping Flowers

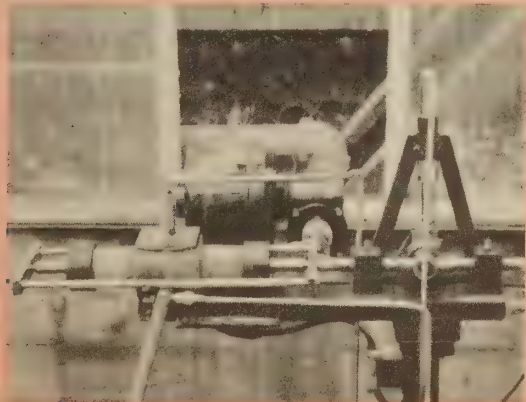
Packing of cut flowers should be carefully studied. The most common error is over-crowding in the shipping boxes. Not securely fastening the blooms in the box will cause bruising of the petals. Cleating or sewing the stems to the box is essential. Cushion the blooms by placing enough padded paper at the bottom of the corrugated box and between the layers of blooms. Wrap the pompons with a loose wrapper. Chrysanthemum "Saf-Pak" is very helpful in shipping standards to market. One dozen blooms are held securely in one "Saf-Pak" holder.

Long distance shipments carry better if the cut flowers are packed dry. Reduction of temperature is accomplished by precooling the packed cut flowers.

Supports

With high labor costs, it has become necessary to eliminate some of the labor in supporting standards and disbuds. The old way of supporting with stakes or stringing each plant has given way to the box-wire and cross-string method of support. Turn-buckles placed near the end of the bed will keep the wires much tighter. Some growers are only using one layer of wire and cross strings and are gradually raising it as the crop grows.

Pompons are usually supported by the string and wire method similar to that described above. Two layers of wires are necessary to give the pompons good support. When growing out-of-doors or in cloth houses, heavier wire is necessary to give proper support, because moisture often collects in the open blooms causing extra weight.



Fert-O-Ject Model E



Plastic house cooled with pad and fans

Insects and Their Control

Aphids, or Plant Lice

All aphids are true sucking insects that insert their beaks through the surface of the leaf or stem and extract the juices from within.

INJURY. The feeding of aphids causes the plants to become sickly and stunted. The leaves curl inward, and when the flower terminal is infested, the blooms will be deformed. Certain varieties of chrysanthemums are more susceptible to attack than others.

CONTROL. Nicofume Fumigation is an easy method of controlling the black aphid but will do very little to control the green or straw-colored aphids. **Lindane** or **Parathion** is much more effective on the very resistant green or straw-colored aphids. **Vapotone** is also effective when used at higher concentrations. **Malathion** good for control of aphid and spider mite.

Chrysanthemum Leaf Miner

The larva or maggot disfigures and weakens chrysanthemum plants by mining in the leaves. It may do considerable harm to the crop, but is easily held in check.

INJURY. The young maggots burrow in the leaf tissue, leaving the upper and lower surfaces intact. The tunnels are irregular and winding. White blotches are thus formed, which later turn brown, and the leaves may die.

CONTROL. As soon as it is noticed that any leaves are infested, they should be picked off. **Parathion** or

TEPP aerosol bombs or sprays containing **Lindane**, **Chlordane** or **Parathion**, are very effective.

Chrysanthemum Midge

The chrysanthemum midge is one of the most serious pests with which the grower has to deal. Under optimum conditions, a little over a month is required to complete the life cycle from the egg to the adult. The eggs are reddish-orange in color and are usually deposited on the tender tips of the growth. Under favorable conditions, the eggs hatch in about three days. The larva wanders about over the surface of the leaf for a day or two before finally penetrating into the leaf.

INJURY. The midge attacks all parts of the plant but prefers the tender growth. If the infestation takes place when the plants are small, they fail to grow, although if the plants are well-developed when the infestation starts, the buds blight or are deformed, and the plant is rendered unsalable.

CONTROL. **Lindane** is effective against young and adults.

Parathion aerosols effective, but require frequent applications.

DDT effective against adults—repeated applications necessary.



Aphids



Gall Midge

Insects and Their Control

Corn Ear Worm

The corn ear worm is a green to brown, nearly smooth caterpillar often mistaken for a cutworm when found within the buds or on the open flowers.

INJURY. It is very destructive to the opening buds, for it feeds on their petals and other parts, deforming if not entirely ruining the flowers.

CONTROL. If the attacked plants are blooming, spraying is out of the question, but thorough treatment with a 3 or 5% **D.D.T.** dust is recommended. After they have worked their way into the buds and are found to be feeding on the open flowers, hand-picking is the only remedy. Spraying the plants with **Deenate 50W** will control them before the color shows. **Parathion** fumigation will also keep them under control.

Cutworms

The larva is dull colored and from one to more than 2 inches in length. They are most active at night, and usually spend the day coiled up just under the surface of the soil at the base of the plant. They should not be confused with the corn ear worm, which cannot be controlled by poison baits.

INJURY. Cut worms obtain their food by biting out sections of the leaf, stem or bud. Various species attack different parts of the plant. The one that is most damaging climbs to the top of the stem and eats into the flower buds.

CONTROL. Those cutworms that feed on the foliage can best be controlled with **Deenate 50W** spray using $1\frac{1}{2}$ pounds to 100 gallons of water. **Parathion** has been suggested as a good control measure and is more effective as a spray.

Greenhouse Leaf Tyer

It gets its name from its habit of spinning light webs inclosing 2 or more leaves or tying together the parts of a single leaf. This caterpillar is very active, and when disturbed, will wriggle off the leaf, often backwards, lowering itself on a silk-like strand.

INJURY. When first hatched, the larvae eat out shallow holes on the under side of the leaf. As they grow, they enlarge these holes but usually do not cut through to the upper surface. The result is that the leaves become skeletonized.

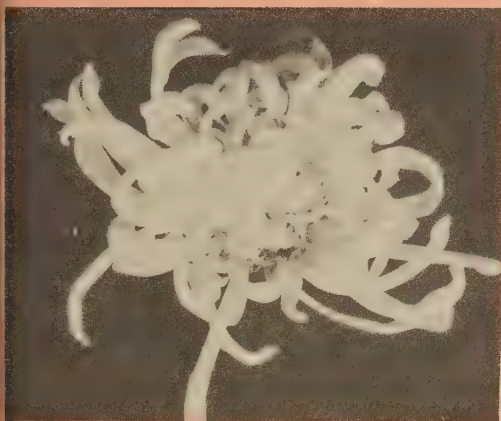
CONTROL. The best poison to control the larvae is **Deenate 50W**, either in the form of a dust or a spray. For liquid spray use $1\frac{1}{2}$ pounds of **Deenate 50W** to 100 gallons of water. Regular fumigations with **Parathion** will keep the leaf tyer under control. **Malathion** is also effective.

Mealy Bugs

Mealy bugs are small, sluggish, whitish, soft bodied insects, measuring up to one-quarter inch long, found in clusters on the undersides of the leaves or in the leaf axils.

INJURY. This pest sucks the juices from the stems and leaves, discoloring and deforming the foliage.

CONTROL. **Parathion** or **Dithio** are the most effective. Repeated applications necessary.



Corn Ear Worm Damage



Leaf Tyer



Mealy Bugs

Insects and Their Control

Mites

Cyclamen mite and broad mite are often found on the same plants at the same time. Broad mite could pass through a complete generation in 4 to 5 days at 70 to 80 degrees, while the cyclamen mite will take 4 to 5 times longer.

INJURY. Infested leaves become deformed curl from the outside inward, and wrinkle so that pockets and pit-like depressions are formed. When the infestation is severe, the mites collect about the buds, causing them to blight. Oftentimes white varieties will show occasional red petals.

CONTROL. Endrin at 1-400 with DuPont Spreader Sticker 1-2000 gave excellent control. Kelthane also is effective. Systox used as a soil drench has been found effective in mite control.

Red Spiders

There are several species of red spiders that attack the chrysanthemum. They vary in color through yellow, orange and red. The body is oval in outline and bears 8 well-developed legs.

INJURY. Red spiders pierce the epidermis of the leaf and draw the liquid contents from the cells, causing the leaf to turn pale around the injured portion. They prefer to collect on the under surfaces of the leaves, which they cover with silken threads.

CONTROL. Aramite, Chlorobenzilate, Tedion, Kelthane, Parathion or Malathion spray or Aramite, Chlorobenzilate, Dithio, Parathion or Malathion bomb. P40 at 3 pounds per 100 sq. ft. after plants are well established; especially desirable for cloth house oper-

ators, will also control foliar nematodes. Plantume 103 smoke generators and Fulex Parathion Fumigators are simple to use and very effective. Dithio is much safer than other insecticides when used on open flowers. Alternating the insecticides will very often give better control.

Symphylids

Symphylids are small white creatures about one-eighth to three-sixteenth inches long. About 40-60 days are necessary for the completion of the life cycle.

INJURY. Symphylids destroy the fine root hairs and small rootlets, thus stunting the plants and often killing them outright.

CONTROL. Complete control can be obtained with Lindane applied to the soil. Lindane can be applied to the surface of the soil either as a dust or as a wettable powder in a convenient amount of water. Application can be made when plants are in the bed, but best results are obtained if the insecticide is worked into the soil prior to planting. Use Lindane 25W at the rate of 8 ounces per 1000 ft. or 1% Lindane dust at the rate of 10 pounds per 1000 sq. ft.

Sowbugs

INJURY. Sowbugs often become so plentiful in the greenhouse that they eat the newly-planted cuttings at the base.

CONTROL. Any of the many poison baits will give partial control, but a complete spraying with Deenate 50W under the benches has given excellent control.



Mite Injury



Red Spider Injury



Symphylid. Above, adult — below, eggs and young

Insects and Their Control

Tarnished Plant Bugs

The tarnished plant bug or sting fly comes into the greenhouse through open doors and ventilators in late summer or early fall and does considerable harm to this crop. Chrysanthemums growing in the open are frequently affected. Varieties such as Mary L. Hall and Sea Gull are attacked to a greater extent than other varieties.

INJURY. It has sucking mouth parts and obtains its food by inserting its long, slender beak into the plant tissues and sucking up the contents of the injured cells, apparently injecting saliva, which causes the death of the tissue in the immediate vicinity. The stem is often slightly bent, and the terminal growth is malformed because of this injection.

CONTROL. Early morning spraying or dusting with any of the pyrethrum materials will kill those bugs that are present but this will have to be done each day for complete eradication. **Deenate 50W** and **Malathion** have been giving fair control, but again these insecticides are best used as a contact. **Parathion** fumigation will control this insect in the greenhouse.

Termites

Termites are not ants, though often called white ants. The food of termites is wood or cellulose. Soil inhabiting forms are the most common in the greenhouse.

INJURY. Termites sometimes injure chrysanthemum plants by working up the center of the plant and

hollowing out the stem. This injury will eventually kill the plant.

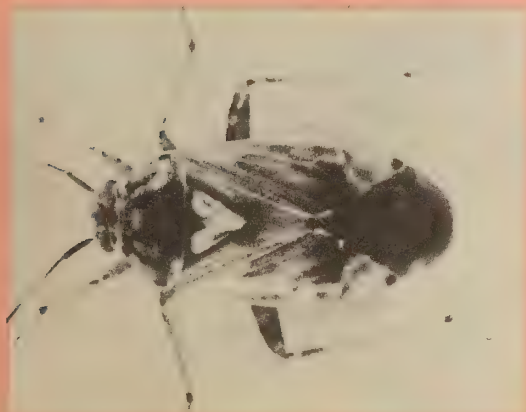
CONTROL. Clean up all wood debris in soil. Replace old wooden benches. Keep wooden bench supports from direct contact with the ground.

Thrips

The chrysanthemum is usually attacked by one or more species of thrips. These small, narrow-bodied, active insects which range in color from yellow to brown or almost black, injure both the leaves and the blossoms. Thrips are a real threat to Florida mum growers.

INJURY. Thrips have mouth parts that are fitted for piercing and scraping the leaf surface and for sucking the juices and other cell contents. The upper surface of the foliage is covered with whitish blotches, while minute black specks appear on the lower surface. Unless a constant watch is kept on the plants and control measures are properly executed, thrips are capable of causing severe injury within a short time.

CONTROL. **Deenate 50W** used at the rate of 1 pound to 100 gallons of water is a very effective control. Other insecticides containing **Lindane** are also recommended. **Parathion** will control the chrysanthemum and onion thrips. Regular dustings or spraying are necessary where infestation is heavy. **Dieldrin** is also very effective.



Tarnished Plant Bug



Thrip Injury



Adult Onion Thrip

Pests and Their Control

Foliar Nematode

The spread of this pest has been very rapid in recent years owing to the increased trade in chrysanthemums and the ease with which the nematode is transported in plants and cuttings. Too few growers have become familiar with this pest, and consequently no effort has been put forth to control it.

SYMPTOMS. The leaves attacked become blotched, turn at first greenish-yellow, then brownish, later gray and finally black until the entire leaf dies and hangs down on the stem. Under conditions of high hu-

midity both in the open during a wet season and under glass due to excessive watering, the spread of the pest may be extremely rapid.

CONTROL. P40 applied at the rate of 3 pounds per 100 sq. ft. has given good control. Wait 2 to 4 weeks after benching before applying. It is better to apply P40 in 2 applications, 1½ pounds each time, 7 to 10 days apart. The latest findings show that foliar nematodes can be controlled with **Parathion** either as an aerosol or liquid spray. **Systox** emulsion applied as soil drench 2-4 weeks after planting is effective.

Diseases and Their Control

Bacterial Stem Rot

SYMPTOMS. Cuttings may appear healthy although infected, grow well up to 8-12 inches high when the stem becomes soft and off-colored. Pith is jelly-like or lacking in such stems. Tops of plants then turn black, exude drops of liquid, and the stem often splits. Develops at high temperatures (75-90 degrees). Often shows up after the plants are pinched.

CONTROL. Remove and burn immediately all affected plants. Wash hands thoroughly after handling plants. Steam infested soil before replanting. Avoid dips for cuttings.

Collar Rot or Stem Rot

SYMPTOMS. The area of stem just at the soil level will show dark colorings first. The entire stem will be girdled, and eventually the plant will turn yellow and die. Usually caused by the common damping-off organisms such as *Rhizoctonia*, *Fusarium* or

Pythium. More prevalent when temperature and humidity are high.

CONTROL. Do not plant cuttings that have been affected with damping-off. Remove all affected plants when noticed. Do not keep the soil too moist. Run a lower humidity if possible. Plant cuttings no deeper than depth they were in propagating media, as too deep planting will hasten development. Have soil well prepared, as compact soils will also encourage trouble. **Terrachlor**, **Parzate**, or **Fermate** drench.

Mildew

SYMPTOMS. Whitish powdery growth on upper surface of leaves.

CONTROL. Spray at regular weekly intervals with a good **wettable Sulfur**, 1½ pounds per 100 gallons of water to which a good commercial spreader has been added. Spray with **Mildex** 4 ounces per 100 gallons of water plus spreader whenever disease appears.

BIOLOGY OF THE FOLIAR NEMATODE



Eelworms moving from the ground up the outside of the stem and leaf-stalks into the basal leaves. (Spring)



Eelworms entering leaf through the stomata. (Spring-Summer)



Eelworms feeding and breeding in leaves and migrating upwards from leaf to leaf (Spring-Autumn)



Eelworms overwintering in soil, dead leaves and in basal buds. (Winter)

Diseases and Their Control

Ray Blight or Flower Spot

SYMPTOMS. The petals first show little spots and then the entire petal begins to rot. May be caused by *Botrytis* or *Ascochyta*. *Botrytis* is spread primarily by splashed water. *Ascochyta* is primarily a disease on outdoor crops.

CONTROL. It is controlled by lowering humidity or spraying plants with **Parzate** when they show color. Spray with **Parzate** one ounce to 4 gallons of water plus one-third teaspoonful of **Du Pont Spreader Sticker** on the flower from below and above as soon as color shows and continue at 5-day intervals. **Orthocide 50W** one ounce to 4 gallons of water plus spreader used as a spray similar to **Parzate** was found a good control. An electric fan, placed above the plants will circulate the air sufficiently to reduce disease. **C.M. 19** when applied every four days will control *Botrytis* without leaving a deposit on the foliage.

Root Knot Nematode

SYMPTOMS. The nematodes or eelworms bore into the roots of the plants and cause knots or galls to develop on the root systems. As a result the plants are weak, yellowish and stunted in growth.

CONTROL. Steam sterilization of the soil is the most effective. **MC 2**, **Vapam**, **VC 13**, **D-D**, **EDB** and **Nemagon** are chemical soil sterilizing materials that have given good control of root knot nematodes.

Rust

SYMPTOMS. Chocolate brown powdery pustules on lower surface of the leaves.

CONTROL. **Parzate**, one ounce to 4 gallons of water is most effective.

Septoria Leaf Spot or Leaf Blight

SYMPTOMS. Distinct circular spot on the leaves. These are greyish-brown in color and become brittle in the center. Affected leaves may turn yellow and die. More prevalent in the open. Some varieties are more susceptible than others. Sea Gull is very susceptible.

CONTROL. When cuttings are received, dunk the tops into **Fermate** (2 tablespoons to a gallon). Spray the plants with **Parzate** one ounce to 4 gallons of water plus one-third teaspoonful of **Du Pont Spreader Sticker** every 10 to 14 days. Cloth house mums should be kept covered until the buds can be seen.

Verticillium Wilt or Seidewitz disease

SYMPTOMS. Margins of leaves turn yellow and eventually wilt or dry up. This begins at base of plant and works up the stem. May affect one side of a stem or plant more than the other. No distinct spots. Varieties vary in resistance to this disease.

CONTROL. Verticillium wilt can be avoided by purchasing our disease-free cuttings produced from **cultured stock**. It is also necessary to plant only into sterilized soil.



Dodder Growing on Mums



Septoria Leaf Spot

Pests and Their Control

Viruses

The word "virus" is being referred to by the medical profession as well as by the florists, and a short explanation of virus should prove of interest.

Viruses of the chrysanthemum are considered to be infectious; that is they can be transmitted to a healthy plant only by contact with an infected plant. They are not carried in the soil, water or air as are other diseases caused by fungi and bacteria.

The virus particles cannot be seen by the most powerful microscopes. Most of them will pass through bacterial filters. They respond like living organisms. They are always present in the sap of diseased plants and can be transmitted to a healthy plant through wounds or by mechanical means. The chrysanthemum is known to be affected with 5 viruses, namely yellows, Aspermy, rosette, mosaic and stunt. Stunt is the only one that has caused much concern. It has been found that aphids as well as mechanical handling will cause stunt to spread.

Once a plant is infected with a virus, it usually always remains affected. To define a virus, the following is as good as any: A virus is a protein which requires the presence of living cells for multiplication and it causes changes in the structure and functions of living cells.

Combination Sprays

At times it is more economical and convenient to mix two or more sprays and apply them in one operation. Before such mixtures are prepared, the grower should be sure no reaction harmful to the plants will occur, and that the efficiency of the separate ingredients is not reduced. Consult your State Entomologist or Plant Pathologist for information on combination sprays for specific crops.

A good combination spray for chrysanthemums which will control most diseases and insect pests, can be made with Lindane, Parzate, DDT and Vapotone. Details on dilutions are as follows:

Material	Amount to Make		
	100 gallons	20 gallons	3 gallons
Water			
DuPont Spreader Sticker	6 oz.	2 tablesp.	1 teasp.
Lindane	1 lb.	3 ounces	1½ tablesp.
Parzate	1½ lbs.	5 ounces	2 tablesp.
Deenate 50W	2 lbs.	6 ounces	3 tablesp.
*Vapotone	½ pt.	3½ tablesp.	1½ teasp.

To prepare: (1) Measure out spreader and dilute in small amount of water. (2) Fill tank with required water and add the diluted spreader and stir. (3) Take out a small amount in jar, add the proper amount of the Parzate and shake vigorously until all the powder is thoroughly wetted. (4) Pour this mixture back into the tank, preferably through a fine screen or cheesecloth and stir. (5) Measure out Vapotone and dilute in small amount of water and add to the tank. Keep stirring or keep agitator running while adding the materials.

MATERIAL AND AMOUNT

(per 100 gallons of water for spraying)

- 2 pounds 15% **Aramite** wettable powder
- 1 pound **Captan** wettable powder
- 1 pound **Chlordane** 50% wettable powder
- 1 pound 25% **Chlorobenzilate** wettable powder
- 2 pounds 50% **DDT** wettable powder
- 1 pound **Dieldrin** 25% wettable powder
- 1 pint 25% **Dimite** emulsifiable solution
- 1 quart **Endrin** emulsifiable solution
- 1½ pounds **Fermate** wettable powder
- 1 pound 25% **Lindane** wettable powder
- 1½ pints 50% **Malathion** emulsifiable solution
- 2 pounds 25% **Malathion** wettable powder
- 1½ pounds 15% **Parathion** wettable powder
- 1½ pounds **Parzate** wettable powder
- ¼ pint 40% **TEPP** emulsifiable solution
- ½ pint 20% **TEPP** emulsifiable solution
- 1 to 1½ pounds 25% **Kelthane** wettable powder
- 1 pint 25% **Kelthane** emulsifiable solution
- 1 pound **Tedion** 25% wettable powder
- 1 pound **Terraclor** 75% wettable powder

*Parathion, Aramite, Endrin may be used in place of Vapotone in this combination spray.

CHRYSANTHEMUM VARIETY DESCRIPTIONS

In the following list (pages 105-144) New Varieties for 1959 are enclosed in a box. These new varieties will not be available before April 1, 1959.

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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7-WEEK GARDEN VARIETIES (Pinch July 6)

OSTOSA Sept. 25 S-2
An intermediate paper white pompon on a semi-dwarf plant. Early and very free flowering. A good addition to the spring garden pots.

CHRIS COLUMBUS Oct. 1 S-5
Intermediate cream decorative. Short, compact and prolific. Top white garden variety for spring pot blooming. Also tops for 3" pot blooming.

JESSAMINE WILLIAMS Oct. 1 S-1
White spoon decorative. A prolific and responsive variety well suited to spring pots with no light and no shade treatment. An appealing form that also creates demand as an outdoor garden variety.

LARRY Oct. 1 S-3
Intermediate paper-white pompon. Compact short habit defines its place as a high quality pot variety suitable for May and June and again in October. This is tops among the 7-week whites for pots.

AVALANCHE Oct. 5 S-1
Large decorative. Tall. Flowers on early crown buds.

HORIZON Oct. 5 S-3
Intermediate white pompon. Outdoor cut flower.

BENORA Oct. 8 S-2
Intermediate pompon. White with ivory centers. A real improvement over Chris Columbus for durability.

MAESTRO Oct. 10 S-1
White pompon. Dwarf, compact growth. Excellent for borders and spring pot plants.

CLASSIC Oct. 10 S-2
Small white semi-formal pompon. Outdoor cut flower.


SILVERPLATE Oct. 12 S-1
White decorative. Outdoor cut flower and spring pot plant.

8-WEEK VARIETIES (Pinch July 13)

PILGRIM Oct. 15 S-1
Intermediate pompon. Clear white. Temperature tolerance of Chris Columbus. Improving that variety in all respects. Spring pot plant program. Durable compact garden variety.

BLIZZARD Oct. 15 S-3
Small productive formal pompon. Clear white. Tolerates 54°. Spray programs May to Oct. Cloth house July and Aug.

CALIF. WHITE DAISY Oct. 15 S-2
Intermediate pure white single. For the very early cloth house. Very temperature tolerant. (Kimoto's White).

ECHO  Oct. 15 P
Paper-white formal pompon of intermediate size. Recommended in the greenhouse spray program from May thru October. Satisfactory as an outdoor cut flower for natural flowering.

Sold under agreement only

IRENE Oct. 15 S-1
Small pompon.

GARDENIA Oct. 15 S-3
Large white decorative. Compact and responsive. Vigor improves Ostosa. Pot plant programs March to early October. Prolific and showy garden variety. Benefited from disbudding.

NORONA Oct. 15 S-1
Small ivory white solid pompon.

PRISTINE Oct. 20 S-6
Intermediate pure white pompon. Cloth house July to Sept. Greenhouse April to Oct.

SHIBUYA WHITE Oct. 20 S-2
Intermediate white daisy. West coast variety.

SILVERTONE Oct. 24 S-2
Intermediate white daisy. Similar in habit to Reward and Buckskin. Vigorous and productive. Fine high temperature performance. Tolerates 54°. Cloth house July to Sept. and greenhouse May through Oct.



New Variety



New Variety Growers Agreement



Growers Agreement

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Pinch July 20)

POPCORN Oct. 25 S-3

Intermediate white pompon. Light pink at low temperatures. Outstanding production. Very good June through Sept. under glass, or in the cloth house from July through Sept.

WHITE POPCORN Oct. 25 S-5

White sport of Popcorn. No trace of pink in flower at low temperatures therefore may be flowered earlier and later in spring and fall.

MONTY Oct. 25 S-4

Large white decorative, very good as pot plant, recommended year round through the South. March through Dec. in the North.

SILVER BOW Oct. 25 S-3

Large white formal disbud pompon. Responsive and productive in the fast disbud programs. Displays a high degree of tolerance to summer greenhouse temperatures.

KEEPSAKE Oct. 25 S-5

White pompon, tall with good spray formation, recommended March through Oct., will be suffused with light pink during early Spring and late Fall.

WHITE KEEPSAKE Oct. 25 S-5

Intermediate ivory pompon. It is devoid of pink tinges at low temperatures. Will tolerate 56°. At high temperature finish, more ivory than Keesake.

PINOCCHIO Oct. 25 S-5

Small pure white pompon. Formal and distinctive for May through Oct. in the greenhouse, Aug. and Sept. in the cloth house.

SONGSTER Oct. 25 S-3

Intermediate white pompon. Withstands heat well. Greenhouse June through Sept. Requires high light intensity.

CREST Oct. 25 P

Medium sized formal pompon disbud. Its dwarf habit makes it a first class pot variety for mid-March thru mid-November. A relatively fool-proof pot variety during high light intensity periods of the year. Far more efficient than Granite State and will easily average 5 breaks per plant. Intolerant of winter low light environments.

Variety	Description	Normal Flowering Date	Price
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CRYSTALLITE  Oct. 25 P

Intermediate formal pompon. Paper-white. Responds earlier than Keesake under high temperature summer conditions. Does not tolerate low temperatures for initiation. Response is uniform and rapid at 60° or over. A high caliber and efficient variety from May thru mid November as a natural spray in the greenhouse.

Sold under agreement only

VESTA Oct. 25 S-2

A white button pompon for summer and early fall flowering. Best during the long day period of the year.

ARCADIA Oct. 28 S-1

Intermediate pompon.

MEMENTO Oct. 30 S-4

Intermediate chalk white single with green discs and durable petals that retain their original form into maturity. Reliable cloth house variety July through Oct. and in the greenhouse from May through Oct.

SILVER CLOUD Nov. 1 S-1

Intermediate white single, flower April through Oct. under glass.

HALO Nov. 1 S-3

White Daisy for high temperature periods in the greenhouse.

SEA GULL Nov. 1 S-3

Intermediate ivory pompon.

ALASKA Nov. 1 S-5

Intermediate white anemone with white cushion. Temperature tolerance of Shasta. Productive, responsive and versatile. Spray programs from late April to early Nov. A greater degree of cushion development than Shasta in summer temperatures.

WHITE DOTY Nov. 1 S-3

Large Pompon, dispray and disbud.



New Variety



New Variety Growers Agreement



Growers Agreement

AVAILABLE APRIL 1, 1959



Crystallite




Stardust

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Pinch July 27)

SNOWCLAD  **Nov. 1 P**
Medium, paper-white disbud. Medium treatment. Flowers a week earlier than either Chalk Cliff or Oregon and develops superb quality during the winter months when Wilson's White is questionably soft. Bud initiation will take place in temperatures as low as 52°. Has class, substance, and is tolerant to high temperatures.


THISTLEDOWN **Nov. 1 P**
Medium to small novel white decorative pompon. An improved Snowdrift flower. Natural spray programs from May thru October.

CAMILLE BAUMANN **Nov. 1 P**
Medium to large single disbud. White spindle on tubular ray petals. Novel form that will enrich variation in fast disbud programs from April thru mid-December. Especially valuable to retail growers who are seeking new and unusual beauty.

SNOW CRYSTAL  **Nov. 3 P**
Medium to large ivory white spider disbud. Fully double form. Feathery spooned petals. Strong habit, and wiry stems make it an exclusively novel pot variety useable the year round. Best with tall treatment. Easily averages five uniform breaks from a soft pinch. A variety that will create interest.

FREEDOM **Nov. 5 S-1**
Intermediate pure white single. Fine green eye. Best flowering season in the cloth house is Sept. and Oct. and under glass Oct. and Nov.

WHITETOP **Nov. 5 S-8**
Intermediate chalk white decorative. Productive and dependable. Top notch white. Greenhouse April to Nov. and in cloth house July through Oct.

SUPREME WHITETOP  **Nov. 5 P**
Large white decorative. Whitetop sport with increased size, less reflexing and improved substance. Stem quality and production also somewhat better. Disspray procedure with high summer temperatures always improves the uniformity of response of the Whitetop family.

 *New Variety*  *New Variety Growers Agreement*

AVAILABLE APRIL 1, 1959

TIPTOP **Nov. 5 S-6**
A distinctive form mutation from Whitetop. The petals are completely tubular. Valuable in the same periods as Whitetop.

FEATHERTOP **Nov. 5 S-5**
An unusually beautiful sport from Whitetop. Petals are deeply serrated or feathered in a manner similar to Snowdrift. Improved vigor and response. Chalk white with smart green eye. Feathertop is not a novelty. It will increase the demand for white in all periods and areas where Whitetop is grown.


ICEBERG **Nov. 5 S-9**
Large chalk white pompon. Tall vigorous growth. Color clarity of Whitetop and Belray. Best year around disbud. When not disbudded, suggest adding one additional long day week for best spray formation. Recommended to grow as sprays from April to Dec. and in the cloth house Aug. through Oct. Temperature tolerance of Whitetop. Tolerates summer temperatures well. Best 10-week white disbud.


MADONNA **Nov. 5 S-2**
Intermediate white pompon. Takes high temperature well. Flower from June to Oct.

ENCORE **Nov. 5 S-4**
Intermediate pompon. Pinks at low temperatures. Requires 60° minimum for bud initiation. Flower under glass from June to natural season and in the cloth house from mid Aug. to early Oct. Superb form and rigid growth.

WHITE ANEMONE **Nov. 5 S-1**
Large anemone, disspray and disbud.

WHITEHOUSE **Nov. 5 S-2**
Intermediate white anemone. Breaks vigorously and thrives best with high temperatures. Recommended for pots from May to Nov. A summer Little America for pots.

PING PONG  **Nov. 5 P**
Small formal pompon. Clear white. A very hard, round and durable flower. Strong, rigid stem and terminal spray. Does not shatter. A large Pinocchio. This will be a shipper's delight. Chalk white, ball type poms as attractive as Ping Pong are always in steady demand.

 *Growers Agreement*

SEE PRICE LIST PAGE 143



Snow Crystal



Ping Pong


WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES


Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-Week VARIETIES (Cont'd)


WHITE MENSA Nov. 5 S-1
Large ivory single.

CHALK CLIFF  Nov. 10 P
Large chalk white decorative pompon. The answer to a white Portrait for pots the year round, using MEDIUM TREATMENT. Foliage, habit, and flower form provide a striking resemblance. Also has a more vigorous breaking habit. A versatile and beautiful white that will pay its way in any pot plant program.

ENSIGN  Nov. 10 P
Intermediate decorative disbud. An ivory-white Bonaffon seedling of excellent substance with a slight cream center and dimpled petals. Well adapted to either the fast disbud or pot plant programs from April thru December. TALL TREATMENT for pots.

PACESETTER Nov. 10 S-4
Intermediate pure white single. Best as sprays from April through June and from Sept. to natural bloom. Also grown some as a pot plant from Sept. to June.

ICE CREAM Nov. 10 S-2
Intermediate decorative with 3-4" diameters. White to cream depending upon temperature. A valuable addition to the fast disbud program from May to Jan. As large a disbud as Iceberg.

VISCOUNT  Nov. 10 P
Large semi-anemone. Chalk white. A vigorous, productive and durable variety well suited to regular and fast spray crops. The substance improves Shasta and Alaska. It develops the vigor of Iceberg, and is the result of an objective to increase the durability and shipping quality of Shasta. Cushion development is small, cream-white in color, and at times, reverts to a daisy form. Readily classified as a practical, high temperature insensitive white anemone pom.


ILLINI IGLOO Nov. 10 S-6
Intermediate ivory white pompon. Good for outdoor shading from July through Oct. Formal and durable, tolerates 54°. Recommended from April through Dec.

SHASTA Nov. 10 S-8
Large Anemone. Tolerates 54°. Very dependable when grown in sterilized soil. Recommended as sprays and disbuds from April through Dec.


DYNAMO Nov. 10 S-1
White Pompon. Excellent in natural season.

VESPER Nov. 10 S-1
Intermediate pompon.

LITTLE AMERICA Nov. 10 S-5
Intermediate pure white anemone. Under glass Oct. and Nov. as sprays and as potted plants from Sept. to mid-May.

ICE FOLLIES  Nov. 10 P
Large decorative. Chalk white. A very durable pot variety especially valuable in winter programs. While smaller than Oregon or Wilson's White it sets a new standard for uniform response, smart form and good breaking action. Combines the best traits of Snowclad and Chalk Cliff in the objective of a white Criterion.

ILLINI SNOWDRIFT Nov. 12 S-5
Novelty, intermediate, feathered decorative. Valuable in artistic arrangements. Grow as sprays from April through Dec.

STARDUST  Nov. 12 P
Formal white pompon of intermediate size. Establishes a larger and more shapely Keepsake form. Its smart formal form has strong consumer appeal. Productive and dependable from April thru November in both regular and fast spray programs in either greenhouse or cloth house. Tolerates 56° minimum.

11-WEEK VARIETIES (Pinch August 3)

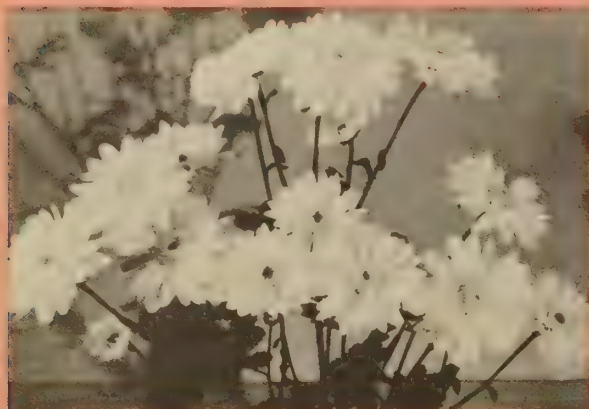
WHITE TAFFETA Nov. 15 S-6
Pure white sport of Taffeta. Recommended for March to May and in Sept. and Oct. programs.

SCULPTURE Nov. 15 S-3
Large ivory white daisy. Recommended from mid-March through May and again in Sept. to natural flowering date.

 New Variety  New Variety Growers Agreement

 Growers Agreement

AVAILABLE APRIL 1, 1959



Viscount



Ice Follies

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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11-Week VARIETIES (Cont'd)

WHITE NORMA Nov. 15 S-1
Large Anemone. Best grown as disbuds from Nov. to early April. White rays and yellow cushion.

SNOWFLURRY Nov. 15 S-1
A white button pompon. Larger than Pinocchio.

ILLINI STARFLOWER Nov. 18 S-2
Large semi-anemone spoon. A novelty in white for the retail grower. Disspray or disbud.

SEAFOAM Nov. 20 S-1
Intermediate ivory white pompon for natural season.

LONG ISLAND BEAUTY Nov. 20 S-3
Large anemone, yellow cushion. Best grown as fast disbud from Nov. to early April.

GRECO'S CARNATION Nov. 20 S-3
Intermediate white pompon. Petals are finely serrated and form somewhat resembles a carnation. Valuable for its natural Thanksgiving season. Not suited to early spring programs.

ERMINE Nov. 20 P
Intermediate ivory-white disbud. Cream-eyed centers. A winter Iceberg for the fast disbud program from November thru April. Extremely tall on the regular schedule.

JOHN BAUMANN Nov. 20 P
Large paper-white spider. Duplex form. Partially spooned petals. A novel and efficient retailers item best grown in a fast disbud program from October thru May. An exceptionally fine winter performer in the North.

HIGHBROW Nov. 20 S-5
Ivory white decorative. Very productive. Superb quality in late cloth house and in the greenhouse from Sept. to Jan.

NEVADA Nov. 20 S-3
Intermediate anemone. Chartreuse cushion.

PRISCILLA Nov. 20 S-3
Intermediate clear white pompon.

JUPITER Nov. 20 P
Large decorative. Pure white. A vigorous spray variety well suited to regular and fast crops. Of Iceberg size and Belray color clarity. Temperature tolerance of Iceberg. Has all the traits that best describe it as an 11-week, pure white Heyday. Greenhouse and cloth house.

SURFSIDE Nov. 23 P
Large single. A clear white. Extra wide petals and green discs. Petalage has substantially more substance than found in either Illini Alba or Sculpture. A splendid co-partner to such varieties as Jubilation, Crackerjack and the Galaxies to be flowered in spray programs from November thru March. Tolerates 56° minimum. Best grown disspray.

ILLINI BOUNTIFUL Nov. 23 S-1
Small ivory pompon.

PARAMOUNT Nov. 23 S-5
Intermediate ivory white pompon. Recommended from Sept. through May.

BELRAY Nov. 24 S-6
Large white pompon. Tall grower. One of the best large whites for spring flowering in the greenhouse in March and April and from Oct. through Dec. Also as fast disbuds during the same period.

CARRARA Nov. 24 S-3
Intermediate pure white decorative. A short variety that tolerates low temperatures. Bud development is retarded by high temperatures. Finish cool for Oct. through Dec. program.

12-WEEK VARIETIES (Pinch August 10)

SILVERCREST Nov. 25 S-3
Small white formal pompon. Markedly improves the appearance and quality of Snowcrest. For flowering from mid-Oct. to April.

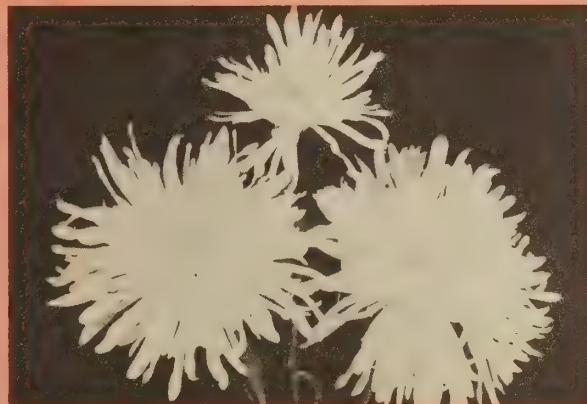
WHITE PRINCESS Nov. 25 S-2
Pure white button. Sport from Princess.

 New Variety  New Variety Growers Agreement

 Growers Agreement

SEE PRICE LIST ON PAGE 143

AVAILABLE APRIL 1, 1959



John Baumann



Jupiter

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES


Variety	Description	Flowering Date	Price	Variety	Description	Normal Flowering Date	Price
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12-WEEK VARIETIES (Cont'd)

WHITE LADY		Nov. 25	S-1
White sport of Beautiful Lady. Disbud.			
ILLINI PEACE		Nov. 25	S-2
A productive white anemone for Thanksgiving.			
CHAMP		Nov. 28	S-3
Large white disbud anemone. Growth is clean and vigorous. Larger than Illini Glacier, approaching the size of White Supreme. Response is uniform and production high in October through April 60° fast disbud programs. Cushion is large, develops well, acquires a chartreuse green overtone.			
WHITE VALENCIA		Nov. 28	S-3
Large single. Requires high temperatures for bud initiation. Very high quality when grown as disspray or disbud in Nov. and Dec.			

CORDOVA		Nov. 30	S-2
Intermediate pompon.			
FORTUNE		Dec. 1	S-5
Formal white pompon. An outstanding quality flower for Nov. and Dec.			
ILLINI GLACIER		Dec. 1	S-2
Large anemone. Clear white with white cushion. Disspray Oct. through Dec. and March and April. Improves. Requires 60° initiation. Cool finish.			

13-WEEK VARIETIES (Pinch August 17)

SNOWSTORM 		Dec. 5	P
A white decorative pompon of medium size. Represents continued advancement to improve quality, productiveness and low temperature tolerance for northern winter pompon programs. Specifically recommended in greenhouse spray programs from December thru mid-March. Fully tolerant to cool 60° environment.			
WHITE ENCHANTRESS		Dec. 5	S-1
Large disbud and disspray anemone. Color requires high light intensity and 60° temperatures for maximum clarity. Under cooler finishes it is a smooth shell pink of great beauty.			
ILLINI ALBA		Dec. 5	S-2
Intermediate chalk white daisy. Devoid of any tendency to pink either from low temperature or aging. Alba will tolerate 56° for initiation and development. Responses are dependable and uniform when lighted through mid March. Best spray formation and height control is obtained with Illini Alba when it is treated as a 14-week variety.			
CAMEO		Dec. 5	S-2
Intermediate ivory decorative.			

ACCLAIM		Dec. 5	S-6
Large formal type pompon. An ivory white Corsair for Dec. to March 15.			
SPANGLES		Dec. 5	S-2
Small white pompon. A late white Sunnyside.			
NORTHWIND 		Dec. 8	P
Medium to large pure white single. Represents a decided improvement in vigor and productive capacity among the presently available white singles for winter production in the North. Useful in the regular greenhouse spray program from December thru February.			
SNOWDROP		Dec. 8	S-1
White button pompon. Pink tinges at low temperatures.			
WHITE SNOWDROP		Dec. 8	S-3
Pure white sport of Snowdrop.			
ILLINI STARLET		Dec. 10	S-3
Intermediate anemone. Improves Garza in form, growth and clarity of color, best for Dec. bloom.			
IMP. WHITE SUPREME		Dec. 10	S-2
Large anemone. Tall disbud. Finish cool.			



New Variety



New Variety Growers Agreement



Growers Agreement

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Illini Alba



Champ

WHITE POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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13-WEEK VARIETIES (Cont'd)

ICECAP Dec. 10 S-7
Intermediate chalk white pompon. Icecap combines the responsiveness of Acclaim, the vigor and production of Corsair with the formal beauty of Snowcap. Will initiate and develop at 56° although, equally as valuable in 60° programs. Because of its extra vigor, best treated as a 14-week variety. An achievement in white for December through mid-March programs.

YUKON Dec. 10 S-2
Intermediate chalk white single. Tolerates 56°.

SATELLITE Dec. 13 S-2
Intermediate cream white pompon. Spray crop from Dec. to March. 15

DOLOMITE Dec. 13 S-2
Intermediate clear white pompon. Adds quality and color clarity to the Dec. season. Tolerates 56°.

SNOWCREST Dec. 13 S-4
Small pompon. Distinctive green eye. Sprays from Dec. to March 15.

14-WEEK VARIETIES (Pinch August 24)

TRENTON Dec. 15 S-2
Intermediate pompon. Good form and substance for natural flowering.

SILVERSMITH Dec. 15 S-5
Intermediate pure white decorative. Fine sprays and production for Dec. to March 1. Tolerates 56°.

HEIRLOOM Dec. 20 S-1
Intermediate decorative.

SNOWCAP Dec. 15 S-5
Large formal pompon. When grown at a 60° minimum night temperature, this is one of the outstanding flowers available to the Dec. to March 1 program.

WHITE RIVIERA Dec. 15 S-1
Intermediate ivory decorative. Does not show pink tinges with low temperature finish. Must have 60° initiation and cool finish.

GARZA Dec. 15 S-4
Intermediate anemone.

WEDDING BELLS Dec. 20 S-2
A small to medium white formal pompon. Uniform and productive.

ELEGANCE Dec. 20 S-5
Intermediate white decorative. Flowers naturally for Christmas. Clean growth with high production and good spray.

15-WEEK VARIETIES (Pinch August 31)

REVELATION Dec. 25 S-5
Intermediate decorative. Excellent for late natural flowering with 50° finish.

SNOW Dec. 25 S-4
Intermediate pompon. Requires 60° for initiation.

TALMEDA Dec. 25 S-4
Intermediate white pompon. Good form and substance.

ILLINI CASCADE Jan. 5 S-4
Large clear white decorative. Tall, responsive. Finishes well at high 60° or low 50° temperature. A valuable addition to the northern winter program. Suggested as winter disbud.

ILLINI SNOWBOUND Jan. 5 S-2
Large informal white decorative with cream center. Requires 60° initiation and 50° development.



New Variety



New Variety Growers Agreement



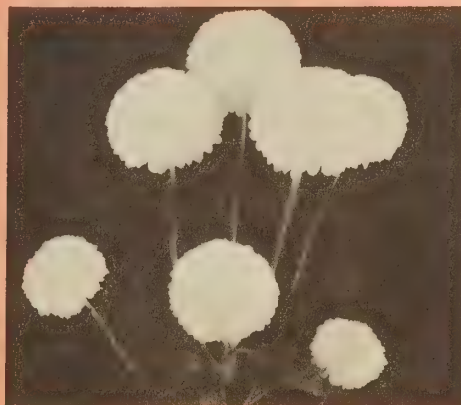
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AVAILABLE APRIL 1, 1959



Elegance



Icecap

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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7-WEEK GARDEN VARIETIES (Pinch July 6)

YEL. CHRIS COLUMBUS Oct. 1 S-5
Intermediate lemon yellow decorative. Short, compact, and prolific. Top yellow garden variety for spring pot blooming. Also tops for 3" pot plant.

MOONLIGHT Oct. 1 S-1
Intermediate sulfur yellow pompon. Short compact growth habit. For border and spring pot plants.

POLARIS Oct. 5 S-1
Golden buff daisy. Background garden variety and Oct. cut flower.

ASTORIA Oct. 5 S-3
Intermediate bright lemon yellow pompon. Free flowering and responsive. More prolific than either Yel. Chris Columbus or Moonlight when grown as a spring plant. An early foreground garden variety.

CHAS. NYE Oct. 5 S-2
Large deep yellow pompon. Showy, prolific garden variety.

CHIKUITA Oct. 5 S-2
Small deep lemon yellow button pompon. Good spring pot plant. An intermediate garden variety.

YELLOW SPOON Oct. 5 S-2
Intermediate light yellow spoon single. For garden and pot culture. Showy and artistic.

LEE POWELL Oct. 10 S-1
Large golden yellow decorative. Vigorous background and cut flower variety.

GOLDRUSH Oct. 10 S-1
Dark yellow daisy. Cut flower variety.

TREASURE Oct. 10 S-2
Small deep yellow pompon. Vigorous, upright habit. Fine cut flower growth. Outdoor cut flower and natural greenhouse programs.

BRIGHT FORECAST Oct. 10 S-3
Very formal yellow pompon. Outstanding flower quality. Background for gardens and outdoor cut flower.


KINGS RANSOM Oct. 10 S-1
Intermediate decorative. Golden yellow. Tops for yellow in no light — no shade spring pot programs. Prolific, strong in habit and medium height. Colorful and equally dependable as a fall garden specimen.

8-WEEK VARIETIES (Pinch July 13)

TOPFLIGHT Oct. 20 P
Medium to small yellow anemone. Regular and fast programs from May thru October. Tolerates 52° bud initiation temperatures and high summer temperatures for development.


YELLOW SILVERTONE  Oct. 24 P
Intermediate deep lemon yellow daisy. Sport from Silvertone. Wide range of temperature tolerance. Valuable in early cloth house and high temperature greenhouse spray programs.

9-WEEK VARIETIES (Pinch July 20)

Sundial  Oct. 25 P
Intermediate feathered spider disbud. Deep lemon yellow. A pot plant companion for Snow Crystal. Shorter in habit, and a little smaller in size. Always responsively uniform. Prolific flowering variety with excellent foliage. A timely reinforcement to supplement variation within pot varieties.

OHIO STATE Oct. 25 S-1
Large, intense yellow decorative. Habit is ideally suited to pots. Breaks well with spread and fine foliage. Its fast uniform response, tolerance of high temperature and brilliant color add efficiency and form variation to the popular Yellow Delaware.

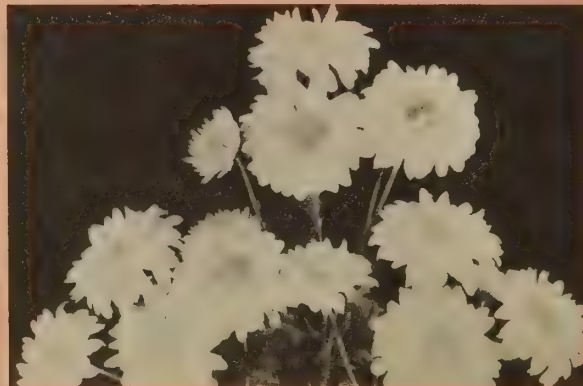
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Ohio State



Sunfire (Page 114)

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Cont'd)

GOLDFINCH Oct. 25 P
Small garden yellow button pompon with excellent flower quality. Greenhouse May 1-June 1; Sept. 1-Nov. 1, cloth house Aug. 1-Sept. 15.

STARLIGHT Oct. 25 S-1
Large yellow daisy. Intolerant of extreme heat. Greenhouse April 15-Nov. 1.

GOLDEN HERALD Oct. 25 S-4
Large decorative. Disspray or disbud April 15-Nov. 1; cloth house July 15-Sept. 15.

GOLD COAST Oct. 25 S-7
Intermediate formal pompon. Deep lemon. Greenhouse April 1-July 1; cloth house July 15-Oct. 1.

EARLY YELLOW DAISY Oct. 25 S-2
Intermediate yellow single. Selection from Calif. Yellow Daisy that will mature 7 to 10 days earlier.

YELLOW DOT Oct. 25 S-1
Small pompon. Two-tone with golden bronze eye.

HAPPINESS Oct. 28 S-4
Large golden yellow single having broad, flat ray petals. In the greenhouses May 1-Nov. 1; cloth house July 15-Nov. 1. This variety is a combination of beauty, productivity and versatility.

SUNUP Oct. 28 S-3
Small deep yellow pompon. Withstands high temperatures and heavy cropping. Greenhouse May 1-Nov. 1; cloth house Aug. 1-Oct. 1.

YELLOW ARCADIA Oct. 28 S-1
Intermediate lemon pompon.

SAUTERNE Oct. 30 S-3
Intermediate intense yellow single. Greenhouse May 1-Nov. 1; cloth house Aug. 1-Oct. 1.

GONDOLA Oct. 30 S-1
Intermediate yellow daisy. Large flower similar to Starbright. Greenhouse May 1-Nov. 1.

YELLOW HALO Nov. 1 S-2
Sport of Halo. Intermediate single, deep lemon yellow. Greenhouse May 1-Nov. 1.

SCHN. YELLOW DAISY Nov. 1 S-3
Intermediate single.

DANDY Nov. 1 S-6
Intermediate yellow pompon. The most temperature tolerant among the 9-week yellow pompoms in the manual. Will initiate and develop at 56°. Greenhouse May 1-Nov. 1; cloth house July 1-Nov. 1. Adaptive to a wide range of environments.

STATESMAN Nov. 1 S-4
Small intense yellow pompon produced in abundance on well-formed sprays. Valuable summer greenhouse variety because of its unusual tolerance to high temperatures. Greenhouse May 1-Nov. 1; cloth house July 15-Nov. 1.

BRILLIANCY Nov. 1 P
An Aztec yellow intermediate single contrasted with accenting green discs. Recognized for rigid stems, a well balanced spray formation, superb flower placement and uniform response throughout its season of use. Grow as a natural spray in greenhouse from May thru mid November.

YELLOW DOTY Nov. 1 S-1
Large deep bronzy pompon. Disbud.

STARBRIGHT Nov. 1 S-2
Large deep lemon single. Dissprays greenhouse April 15-July 1 and Oct. 1-Nov. 15.

YELLOW DAISY Nov. 1 S-1
Intermediate lemon yellow single.

YELLOW SEA GULL Nov. 1 S-1
Intermediate deep lemon pompon.

SUNRAY Nov. 1 S-3
Small anemone. Productive and responsive.

HONEYMOON Nov. 4 S-1
Large yellow daisy. Good form and an unusually clear yellow color. Greenhouse May 1-Nov. 15; cloth house July 15-Oct. 1.



New Variety



New Variety Growers Agreement



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Sundial



Fanfare (Page 115)

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES


Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Pinch July 27)

BARCAROLE	Intermediate lemon pompon.	Nov. 5	S-2
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YELLOWTOP	Bright lemon yellow sport of Whitetop. Same habit and vigor. Achieves maximum value in cloth house programs Aug. 1-Nov. 1. Greenhouse April 1-Nov. 15.	Nov. 5	S-6
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GOLDTOP 	Intermediate pompon. Deep lemon yellow. A recognized color improvement over Yellowtop sporting from Whitetop. The deep, smooth color is enhanced by a pronounced green eye. The flower is more ball shaped than Yellowtop and substance is improved. A preferred replacement for greenhouse and cloth house programs.	Nov. 5	P
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AZTEC	Intermediate deep yellow daisy. Greenhouse May 1-July 1 and Sept. 15-Nov. 1.	Nov. 5	S-2
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MARY HALL	Intermediate deep lemon pompon. Tolerates high temperatures well. Greenhouse May 1-Nov. 15; cloth house July 15-Oct. 1.	Nov. 5	S-4
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CRESCENDO	Large yellow pompon. Outstanding variety for high temperature periods. Tall. Greenhouse June 1-Oct. 1; cloth house Aug. 1-Oct. 1. Tinges bronze at low temperature finishes.	Nov. 5	S-6
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CONSTELLATION	Intermediate decorative. Brilliant yellow.	Nov. 5	S-2
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YELLOW BEAUREGARD	Intermediate pompon. Clear golden yellow at all temperatures. Temperature tolerance of parent variety. Greenhouse May 1-Nov. 15; cloth house July 15-Nov. 1.	Nov. 5	S-7
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YELLOW ICEBURG	Clear lemon yellow sport from Iceberg. Spray programs May through mid November are always benefited by early center bud removal.	Nov. 5	S-8
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 New Variety  New Variety Growers Agreement


GOLDBERG 	Large pompon. Golden yellow sport from Yellow Iceberg. Definite color intensification over Yellow Iceberg. Flower is harder, more double and slightly smaller. Smart form and sharp response are coupled with vigorous, dependable production. An essential variety for all regular and fast spray programs.	Nov. 5	P
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GOLDEN BANTAM 	Small pompon. Deep golden yellow. Its heavy production without sticking at high temperature; its superb form retention coupled with intense color and durability rank it without peer among small yellow poms. Vigorous habit makes it adaptable to both regular and fast crops in cloth house and greenhouse. A gem in its class and a real achievement for its recommended period.	Nov. 5	P
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LUMINARY 	Intermediate yellow disbud. Decorative form. A Bonnaffon seedling that performs at its best in pots during the warm periods of the year from mid June thru October. MEDIUM TREATMENT. When Bonnaffon DeLuxe stalls in the summer, switch to Luminary.	Nov. 5	P
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SUNFIRE 	Medium to large single. Dark yellow. A top performer in either fast or regular spray programs from May thru mid November. The combination of Sunfire's improved traits enables it to compete favorably with the present varieties of Happiness, Sauterne, and Aztec.	Nov. 5	P
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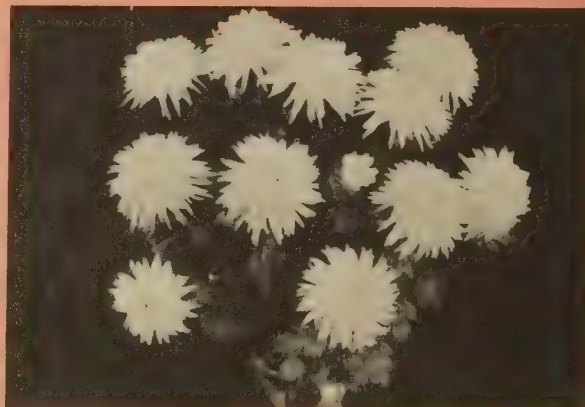
LUXURY	Large decorative. Clear yellow when restricted to high temperature flowering. Superb fast disbud May 1-Nov. 1. Disbudded spray program May 1-Nov. 1; cloth house Aug. 1-Oct. 1.	Nov. 8	S-4
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 Growers Agreement

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Golden Bantam




Luminary

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

YELLOW SHASTA		Nov. 10	S-8
Large light lemon yellow anemone. Greenhouse April 1-Jan. 1; cloth house Aug. 1-Oct. 1.			
CREAM SHASTA		Nov. 10	S-2
Beautiful color addition to the shasta group.			
JEALOUSY		Nov. 10	S-3
Small pompon. Intense yellow, bright green eye. Hard, ball type. Durable, prolific and dependable. Greenhouse March 15-Nov. 15; cloth house Aug 1-Oct. 1.			
YELLOW IGLOO		Nov. 10	S-5
Intermediate deep lemon yellow pompon. Selection from Illini Igloo with same habit and temperature tolerance. Greenhouse April 1-Nov. 15; cloth house July 15-Nov. 1.			
HEYDAY		Nov. 10	S-7
Intermediate bright yellow pompon. Will initiate and develop its buds well at 56°. Characterized by open terminal sprays at any time of the year when it can be grown. Greenhouse April 1-Nov. 15; cloth house August 1-Nov. 1.			
GOLDEN SHASTA 		Nov. 10	P
Large golden-yellow anemone. An expressive color intensification sport from Yellow Shasta. Superior color replacement for all flowering periods, whereby it provides exceptional merit during periods when Yellow Shasta fades.			

11-WEEK VARIETIES (Pinch August 3)

SOUVENIR		Nov. 15	S-2
Intermediate dark yellow daisy with an early 11-week response. In regular programs it achieves best spray formation when treated as a 12-week variety. Greenhouse programs mid September through mid December and mid March through mid May.			
ESQUIRE		Nov. 15	S-5
Intermediate deep yellow decorative. Larger than Yellow Highbrow. Strong, trim, growth habit with sprays resembling Forty Niner. Tolerates 56° for bud initiation and development. Its point of contribution to the 11-week yellow pompoms lies in its dependability within a wide range of temperatures. Esquire performs well in the late cloth house and greenhouse programs mid September through mid December; again in mid March through mid May.			
YELLOW TAFFETA		Nov. 15	P
Intermediate lemon-yellow sport from Taffeta.			



New Variety



New Variety Growers Agreement

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Esquire

Variety	Description	Normal Flowering Date	Price
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YELLOW PACESETTER		Nov. 10	S-3
Lemon yellow sport of Pacesetter. Greenhouse April 15-July 1 and Sept. 15-Nov. 15; cloth house Aug. 1-Nov. 1.			

GOLDEN CLIMAX

	Nov. 10	P
Intermediate pompon. Golden bronze sport of Climax. Regular crops of climax and its sports are improved by the reduction of one long day week prior shade.		

YEL. ILL. SNOWDRIFT

	Nov. 12	P
Small novelty decorative. Intense yellow sport of Illini Snowdrift. Similar to original. Natural greenhouse spray program from mid April thru mid November. Natural spray, pinched pots for the same period using TALL TREATMENT.		

FANFARE

	Nov. 14	P
Golden-yellow intermediate anemone for natural spray pompoms. Performs amazingly well during the same period that Crescendo is flowered. Spray programs from May thru mid November. Well adapted to cloth house conditions also. Because of extreme inherent vigor, one long day week can be dropped from the 10-week regular schedule. Finishing temperatures less than 60° induces bronze tinges.		

SHANE

	Nov. 15	P
Intermediate to large anemone. Deep golden yellow. A colossal version of Yellow Shasta. Stronger in habit and vigor, deeper in color. Shane is an excellent answer for a late fall, winter and spring dark yellow Shasta. Its uniform response, vigor and size also makes for superlative fast disbuds and bantams. Shane will be recognized as progressive improvement for northern cut flower programs in the winter.		

YELLOW SCULPTURE

	Nov. 15	S-2
Lemon yellow single. Greenhouse March 1-June 1 and Sept. 15-Dec. 1.		

PRINCETON

	Nov. 15	S-1
Intermediate golden decorative.		



Growers Agreement

SEE PRICE LIST PAGE 143



Shane

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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11-WEEK VARIETIES (Cont'd)

GOLDEN CHORD Nov. 15 S-5
Intermediate pompon. Intense golden yellow. Greenhouse Sept. 15-Dec. 15. Requires 60° for initiation.

FORTY-NINER Nov. 15 S-7
Intermediate brilliant golden yellow pompon. Requires 60° for initiation and high light intensity for maximum production. Greenhouse Sept. 15-Dec. 15.

GOLD BALL Nov. 15 S-6
Intermediate golden yellow pompon. Temperature tolerance improves Golden Chord and Forty Niner. Hard, durable. Size of Corsair. Greenhouse March 1-June 1 and Sept. 15-Dec. 15.

ILLINI GOLDOCKS Nov. 15 S-3
Intermediate golden yellow decorative. Tall and vigorous. Requires high light intensity for maximum production. Greenhouse Sept. 15-Nov. 15. Requires 60° or less to develop buds.

SUSANNE MILLER Nov. 15 S-2
Large anemone. Deep yellow cushion. Disbud Nov. 1-April 1.

ILLINI BONBON Nov. 18 P
Very small dark yellow anemone. Short growth habit. Dainty individual flowers develop perfect well-rounded cushions and are borne in massive clusters on short natural sprays. Exclusively for pots from March thru June and October thru December. MEDIUM or TALL TREATMENT.

ILLINI GOLDRIFT Nov. 18 P
Intermediate feathered decorative. Bright golden yellow. Form closely resembles Illini Snowdrift. Growth is cleaner, stronger and requires little or no disbudding. Flower is larger and fully double. Intolerant of summer heat. Sufficiently vigorous to produce good crops late fall, winter and spring.

YELLOW L. I. BEAUTY Nov. 20 S-2
Large lemon anemone. Best grown as a fast disbud Nov. 1-April 1.

YELLOW Highbrow Nov. 20 S-4
Sport of Highbrow. Intermediate golden yellow pompon identical in habit with Highbrow. Requires 60° for initiation. Greenhouse Sept. 15-Jan. 1.



New Variety



New Variety Growers Agreement



Growers Agreement

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LOLLIPOP Nov. 20 S-5
Lemon yellow pompon. Very formal, round and hard. Has a long season of usefulness. Fast response, and good production. Greenhouse March 15-May 1 and Sept. 15-Jan. 1.

PIPPIN Nov. 20 S-4
Intermediate yellow pompon. Produces heavily on compound sprays. Greenhouse March 1-May 1 and Sept. 15-Dec. 15.

KLONDIKE Nov. 20 S-3
An orange yellow pompon. Greenhouse Sept. 15-Dec. 1. Give one additional long day week to add height.

BOJANGLES Nov. 20 S-1
Yellow daisy. Intense, heavy petallage.

YELLOW NEVADA Nov. 20 S-2
Intermediate light lemon anemone.

ILLINI SUNSPOT Nov. 20 S-3
Large yellow pompon. Responds well to disbudding. Greenhouse Sept. 15-Dec. 1.

ETUDE Nov. 20 P

Large semi-formal pompon. A rich yellow. Performs well on either the regular or fast spray schedules from March thru May and mid September thru December. Spray is benefited when center bud is removed.

SULTAN Nov. 22 S-2
Large formal decorative. Golden yellow to amber at low temperatures. Temperature tolerance of Forty Niner. Greenhouse March 1-June 1 and Sept. 15-Dec. 1.

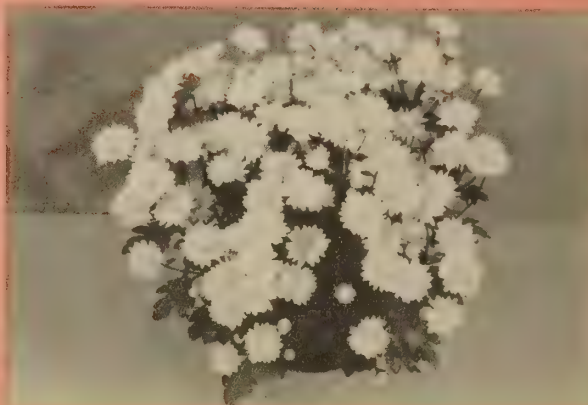
YELLOW PARAMOUNT Nov. 23 S-4
Deep yellow sport of Paramount. Greenhouse March and April also Sept. 15-Dec. 15.

GOLDEN PARAMOUNT Nov. 23 P

Intermediate formal pompon. Intense golden yellow. Sport from Yellow Paramount.



Etude



Illini Bonbon

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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12-WEEK VARIETIES (Pinch August 10)

GOLDENROD	Full round and solid light yellow pompon.	Nov. 25	S-2
ILLINI GOLD	Small golden yellow pompon.	Nov. 25	S-1
GOLDSMITH	Large golden yellow decorative. Disspray Oct. 15-Dec. 1. Requires 60° for initiation.	Nov. 25	S-3
HIGHLANDER	Intermediate intense yellow decorative. Sprays Oct. 15-Jan. 1.	Nov. 25	S-3
SUNNYSIDE	Intermediate deep lemon pompon. Fine Thanksgiving variety.	Nov. 25	S-4
ILLINI WAMPUM	Beautiful, bright yellow anemone with greenish yellow cushion. A good addition to the late winter and early spring program, March 1-May 1, and Sept. 15-Jan. 1.	Nov. 25	S-2

13-WEEK VARIETIES (Pinch August 17)

JACKPOT	Large golden yellow decorative. Dissprays. Must have 60° initiation temperatures.	Dec. 5	S-1
YELLOW ACCLAIM	Yellow sport from Acclaim. Sprays Nov. 15-March 15.	Dec. 5	S-4
GOLDEN ACCLAIM	Intermediate golden yellow pompon. Selection from Acclaim. Intensification of Yellow Acclaim. Spray Nov. 15-March 15.	Dec. 5	S-5
YELLOW CAMEO	Intermediate lemon decorative. Vigorous and productive in natural season.	Dec. 5	S-1
YELLOW ENCHANTRESS	Large disbud and disspray anemone. Growth habit is very similar to original parent. Grown in regular and fast disbud programs December through mid March.	Dec. 5	S-1
CINDERELLA	Intermediate deep golden yellow single. Spray crops. Nov. 15-March 15.	Dec. 5	S-2

Variety	Description	Normal Flowering Date	Price
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YELLOW VALENCIA	A sport formerly known as Golden Jane. Best vigor and form of Valencia family. Disbud and disspray. Nov. 15-Jan. 1.	Nov. 28	S-3
YELLOW CORDOVA	Intermediate deep lemon pompon.	Nov. 30	S-1
YELLOW FORTUNE	Deep yellow sport of Fortune. Sprays Nov. and Dec.	Dec. 1	S-3
OMEGA	Intermediate deep lemon pompon. Very productive. Greenhouse Oct. 1-April 15.	Dec. 1	S-4
YELLOW GALAXY	Sport of Galaxy. Deep lemon yellow. Fine for fall, winter and early spring programs. Oct. 1-May 1.	Dec. 1	S-4

CORONATION	Intermediate to large decorative. Intense golden yellow. Larger, more beautifully formed than Corsair, also responding more uniformly and rapidly. The sprays are open and bunch well. Coronation will initiate and develop at 56°. Provides fine 3"-4" disbuds in winter fast programs. Best sprays are obtained when Coronation is treated as a 14-week variety. Coronation materially strengthens winter programs when flowered December through mid March.	Dec. 5	S-5
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SPUNGOLD	Intermediate single. Deep lemon yellow. Very responsive in winter programs where it outproduces Yellow Galaxy. Its stocky, rigid growth, high production and good substance make it a valuable winter variety. Fine companion for Northwind.	Dec. 8	P
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DARK YELLOW SATELLITE	Dark yellow sport from Yellow Satellite. A crisp, formal pompon of fine response in 60° December through February programs. Color is a decided improvement over the original.	Dec. 10	S-3
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IMP. YELLOW SUPREME	Large anemone. Disbud. Tall.	Dec. 10	S-2
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New Variety



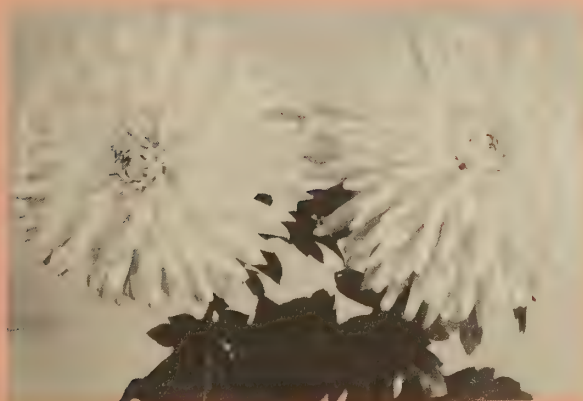
New Variety Growers Agreement



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SEE PRICE LIST ON PAGE 143



Coronation



Spungold

YELLOW POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price	Variety	Description	Normal Flowering Date	Price
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13-WEEK VARIETIES—(Cont'd)

CORSAIR		Dec. 12	S-6	YELLOW SNOWCREST		Dec. 13	S-2
Large yellow pompon. A "best" for winter spray programs, Nov. 15-March 15. Requires 60° minimum for initiation.				A clear yellow sport. Bright green eye. Sprays Dec. 1-March 15.			

14-WEEK VARIETIES (Pinch August 24)

YELLOW RIVIERA		Dec. 15	S-1	GOLDEN ELEGANCE		Dec. 20	S-4
Intermediate decorative. Initiate at 60°. Finish cool. Sprays Dec. 1-March 1.				Intermediate lemon yellow decorative. A sport from Elegance and identical to it in all respects except color. Very responsive and tolerant to 60° initiation and development. Can be recommended in December through February programs. Of medium height and vigor. The Elegance series greatly strengthens northern winter programs. They mature naturally for Christmas.			
YELLOW GARZA		Dec. 15	S-2	SUN VALLEY		Dec. 20	S-4
Intermediate anemone. Lemon.				Intermediate to large pompon. Intense golden yellow, enhanced by a striking green eye. Strong grower with heavy production. Requires 60° for initiation and tolerates winter 60° programs well. A week later than Corsair, shorter, heavier and much more beautiful. Benefited by center bud removal. Constitutes a very significant advance in 14-week pompoms. It should rapidly become an important 60° yellow pompon in the North for December through February programs.			
SHAMROCK		Dec. 15	S-4	VIBRANT		Dec. 20	S-4
Large yellow decorative. Disspray programs, Dec. 1-March 1.				Intermediate deep lemon decorative. Disspray Dec.			
DECEMBER GOLD		Dec. 15	S-1	SUNRISE		Dec. 20	S-3
Large deep golden yellow pompon.				A yellow pompon best described as a late Gold Coast. Sunrise is not sensitive to low night temperatures.			
ILLINI BRIGHTYES		Dec. 15	S-2	GOLDEN ANNIVERSARY		Dec. 24	S-2
Intermediate anemone. Lemon yellow ray; dark yellow cushion. Open sprays, normally terminal. Petioles are stiff, stems wiry and strong. Requires 60° for uniform initiation. Tolerates 60° or less for development. Brighteyes has never shown a trace of vegetativeness and constitutes a winter Illini Wampum. Production is average. Quality high. Recommended December through February.				Small intense yellow pompon.			

15-WEEK VARIETIES (Pinch August 31)

SIREN		Dec. 25	S-3	GOLDEN SNOWBOUND		Jan. 5	S-2
A deep yellow decorative. Smaller than Vibrant but very similar to it and flowers later.				Intermediate golden yellow decorative. Color intensification of Illini Yellow Snowbound. Natural flowering. 60° initiation. 50° development.			
YULEFLAME		Dec. 25	S-3	ILLINI YEL. SNOWBOUND		Jan. 5	S-2
Large decorative. Deep lemon.				Yellow sport of Snowbound. Requires 60° for initiation and 50° for development.			
YELLOW SNOW		Dec. 25	S-3				
Intermediate pompon.							



New Variety



New Variety Growers Agreement



Growers Agreement

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Sun Valley



Golden Elegance

BRONZE & RED POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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7-WEEK GARDEN VARIETIES (Pinch July 6)

W. P. SNYDER		Oct. 1	S-1
Intermediate decorative. Apricot bronze. Good garden and pot plant culture. Requires 60° minimum temperatures.			
REMEMBRANCE		Oct. 5	S-2
Intermediate decorative. Apricot bronze. For garden and pot plant culture. Best with 60° minimum temperatures.			
AGLOW		Oct. 5	S-1
Orange-bronze pompon. Small flower. Low compact growth. Spring pot plants. Showy fall garden variety for a foreground border.			
LIPSTICK		Oct. 5	S-3
Small burgundy red cushion pompon. Dwarf spreading habit coupled with free breaking action add up to a reliable May and June pot plant as well as in October. SHORT TREATMENT recommended. Very shapely and colorful if finished at 60° or less. A fine prolific garden variety.			
MONA		Oct. 5	S-1
Very hard, intermediate rust bronze pompon. A variety for border and pot culture.			
HUNTSMAN		Oct. 5	S-1
Red bronze decorative. Outdoor cut flower. Showy, dependable. Background garden variety.			
RED VELVET		Oct. 10	S-1
Intermediate crimson red decorative.			
CARMINE QUEEN		Oct. 10	S-1
Carmine red pompon. Outdoor cut flower.			

8-WEEK VARIETIES (Pinch July 13)

RADIANCE		Oct. 15	S-2
Intermediate red decorative. Breaks freely. Responds uniformly. Non-fading color. Color brighter, habit more prolific than Red Velvet. Valuable garden variety. Spring pot plant.			
CALUMET		Oct. 15	S-2
An apricot bronze pompon of superior flower quality for cut flower purposes. Very fine for the spring crop in the greenhouse, the earliest cloth house crop. Excellent growth as natural cut flower. Background plantings for gardens.			

Variety	Description	Normal Flowering Date	Price
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DOLLI-ETTE		Oct. 10	S-2
Intermediate golden bronze spoon. An interesting and colorful novelty. A shapely, spring pot plant. Prolific and durable as a foreground garden variety. New forms such as this will stimulate interest and appeal for the early garden varieties.			
TORONTO		Oct. 10	S-2
Intermediate orange bronze decorative. Excitingly beautiful in the garden. Sturdy stems, prolific bloomer, and a spreading cushion type growth. Attractive spring pots. Establishes new standards in the 7-week group. A "must-have" for every home garden.			
CARNIVAL		Oct. 10	S-2
Large pompon. Glowing orange red. Strong. Background garden variety.			
MOROCCO		Oct. 12	S-1
Intermediate reddish bronze decorative. Free breaker, with a rigid, spreading growth habit. Excellent spring pot plant. Superb fall garden variety. Contributes needed durability to the garden variety group.			
CORALHUE		Oct. 12	S-1
Small apricot coral pompon. Low, spreading growth habit. Free breaker. Spring pot plant. Effective as a foreground garden variety. More double and more prolific than Joy-bringer.			
MRS. DuPONT		Oct. 12	S-1
Large buff apricot decorative. Spring pot plant.			
RAJAH		Oct. 15	S-1
Large scarlet red daisy. Natural cut flower outdoors and greenhouse. Background garden variety.			
JAMES STEWART		Oct. 15	S-1
Apricot gold pompon. Responds with Norona in the early shadings. July cloth house. Natural cut flower for greenhouse and outdoor plantings.			

 **New Variety**  **New Variety Growers Agreement**

 **Growers Agreement**

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SEE PRICE LIST ON PAGE 143



Majestic



Andante

BRONZE & RED POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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8-WEEK VARIETIES (Cont'd)

TALISMAN Oct. 20 S-1
Talisman bronze; intermediate daisy. Recommended in the greenhouse, April 15-Aug. 1. Cloth house, July 15-Oct. 15. Natural cut flower.

PARADISE Oct. 20 S-1
Intermediate coral red single. Recommended for greenhouse April 15-Aug. 1. Cloth house July 15-Oct. 15.

MAJESTIC Oct. 20 P
Intermediate incurved disbud. Large pompon. Warm orange-bronze color with coral overtones. Short and spreading habit with prolific breaking action. Attractive foliage. Quality, appeal, and dependable performance results in one of the best early bronzes for pots bred to date. Border garden variety.

LEE-ETTE Oct. 23 S-1
Small silver bronze double spider. Only reverse color displayed on completely tubular petals. A bizarre novelty for spring. Equally as attractive as an intermediate fall garden variety.

RESOLUTE Oct. 24 P
A large reddish-bronze semi-incurved pompon. Strong, rigid growth habit. Versatile for pots MEDIUM TREATMENT, fast disbuds, and regular spray programs from April thru October. Should make a durable outdoor natural cut flower variety in the southern states.

9-WEEK VARIETIES (Pinch July 20)

GAIETY Oct. 25 S-3
Large coral bronze single. Sprays, April 15-June 15; Sept. 15-Oct. 15.

FIREBIRD Oct. 25 S-1
Intermediate red bronze decorative.

BRONZE DOT Oct. 25 S-3
Small pompon. (Red Dot) Good two-tone. Cloth house July 15-Oct. 25.

SALLY Oct. 25 S-3
Small pompon. An intensified bronze and increased size selection from Bronze Dot. Cloth house, July 15-Oct. 25.

BUCKSKIN Oct. 25 S-4
A tawny bronze daisy. Very productive. Greenhouse, April 15-Nov. 1; Cloth house, July 15-Oct. 25.

ANDANTE Oct. 25 P
Intermediate decorative disbud. Apricot-bronze. Habit well adapted to pots from mid April thru October. MEDIUM TREATMENT.

PAXON Oct. 25 S-3
Intermediate decorative disbud. A luminous apricot pastel rarely found in the chrysanthemum color range. An English development that grows and develops into superb fast disbuds from April thru June and again from September thru mid November. High summer finishing temperatures affect color loss and form distortion due to some reflexing of petals.

DOROTHY HYDE Oct. 25 P
Intermediate semi-incurved disbud. Bright orange-bronze. Greater tolerance to low light and temperature conditions allows it to be flowered several months earlier than Fred Yule in the spring. Buds will initiate and develop at 56° or above. Its dependable and vigorous habit makes for a fine fast disbud from March thru October.

STUART OGG Oct. 25 P
Intermediate decorative disbud. A luminous apricot pastel rarely found in the chrysanthemum color range. An English development that grows and develops into superb fast disbuds from April thru June and again from September thru mid November. High summer finishing temperatures affect color loss and form distortion due to some reflexing of petals.



New Variety



New Variety Growers Agreement



Growers Agreement

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Dorothy Hyde



Resolute

BRONZE & RED POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Cont'd)

SYBIL Oct. 30 S-2
Intermediate golden apricot daisy. Productive and durable. Has petallage and substance. Versatile and brilliant color. Spray programs May 1-Oct. 30. Tolerates 56°.

BRONZECHIP Nov. 1 S-6
Intermediate decorative. Lively orange-bronze sport of Bluechip. Valuable cloth house variety, July 15-Nov. 1. Recommended for the greenhouse, May 1-July 1, and Sept. 1-Nov. 15.

SENECA Nov. 1 S-1
Intermediate copper orange decorative.

GINGER Nov. 1 S-1
Intermediate reddish bronze anemone. Free breaking habit. Will initiate and develop its buds at 56°. Produces a symmetrical pot plant, Oct. 1-June 1. A livelier color than Gypsy. Has a more extended flowering period than Barbara Fuller.

FIREFLY Nov. 1 S-1
An orange red pompon that holds its color exceptionally well.

10-WEEK VARIETIES (Pinch July 27)

JETFIRE Nov. 5 S-5
Intermediate flaming red decorative. A color that holds even in high temperatures. Outstanding in the cloth house, Aug. 1-Nov. 1. Greenhouse, April 15-Nov. 15. Best on sterilized soils. Susceptible to verticillium wilt.

NECTARINE Nov. 5 S-2
Intermediate apricot orange pastel decorative. Has no color competition during its season. Vigor of Copperhead. More beautiful form. Ideal either as a spray or fast disbud, April 1-June 15, and Sept. 15-Nov. 15, when able to finish at 60° or less. Cloth house, Sept. 15-Nov. 1.

ORANGE BEAUREGARD Nov. 5 S-4
Lively, light orange or golden bronze sport from Beauregard. Yellow during summer high temperatures.

DILLON BEAUREGARD Nov. 5 P
Intermediate pompon. Intense reddish bronze. Possesses a large, full flower with broad petals devoid of notched tips. An all round size and form improvement over Dk. Beauregard.

Variety	Description	Normal Flowering Date	Price
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BRONZE DAISY Nov. 1 S-1
Intermediate light bronze single.

IMP. BR. DAISY Nov. 1 S-2
Intermediate copper red bronze single.

BUCCANEER Nov. 1 S-3
Rich orange bronze daisy. Excellent habit. Dependable fall variety. Sept. 15-Nov. 15.

RED SENECA Nov. 1 S-1
Intermediate rust red decorative.

BR. BUCKINGHAM Nov. 1 S-1
Intermediate rust orange single.

BARBARA FULLER Nov. 1 S-2
A dark coral red anemone. Dwarf compact growth habit. Pot disbuds Sept. 1-Dec. 1. Improves Gypsy in all respects.

NAVAHO Nov. 1 S-1
Intermediate brick red pompon.

RED DAISY Nov. 1 S-2
Intermediate single.

IMP. RED DAISY Nov. 1 S-1
Intermediate single. Petallage color and spray surpass Red Daisy.

BEAUREGARD Nov. 5 S-6
A reddish orange pompon. A very versatile variety that produces good flowers every month of the year. Cloth house, July 15-Nov. 1. Greenhouse, April 1-Nov. 15.

DARK BEAUREGARD Nov. 5 S-5
Intermediate pompon. A luminous mahogany bronze sport of Beauregard. Slightly smaller flower. Better high color retention. Greenhouse, April 1-Nov. 15, Cloth house, July 16-Nov. 1.

BUTTERSCOTCH Nov. 5 S-1
Intermediate formal pompon. Golden orange.

RED RUST Nov. 5 S-1
Intermediate decorative. Rust Bronze.

RUBICON Nov. 5 S-4
Intermediate red bronze decorative. Greenhouse, May 1-July 1, and Sept. 15-Nov. 15. Cloth house, Sept. 15-Nov. 1.

 New Variety  New Variety Growers Agreement

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Paxon



Alex Colson (Page 139)

BRONZE & RED POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

MAGICIAN Nov. 5 S-2
Large reddish bronze pompon. Excellent form.

BITTERSWEET Nov. 5 S-2
Intermediate red bronze single.

GYPSY Nov. 8 S-1
Small rust bronze anemone. Pot disbud, Sept. 15-Jan. 1.

BRONZE PORTRAIT Nov. 8 P
Intense, reddish-bronze pompon. A Samovar color addition to the ever-widening Portrait series. Useful in greenhouse spray program from March thru mid June and again from late September thru mid November.

SAMOVAR Nov. 10 S-3
Intermediate intense rust red pompon. Cloth house, Sept. 15-Nov. 1. Greenhouse, Sept. 15-Nov. 15.

INCA Nov. 10 S-2
Intermediate anemone, amber-bronze turning to bright yellow at high temperatures. Sprays, April 15-Nov. 15.

DAYBREAK Nov. 10 P
A bright and lustrous orange anemone disbud. Attains 4-5" diameters with a large and well-rounded cushion. A uniquely different and tasteful color for fast disbud programs from late March thru mid November. Color remains smooth under high temperature finishes although intensity may be reduced.

GILTGLOW Nov. 10 P
Intermediate bi-colored single. An expressive reddish-bronze contrasted with a smart green disc. Gold reverse. Slow disc development and fine color retention add up to excellent keeping qualities either on the bench or when cut. Medium to short growth habit. Recommended for the regular spray program from mid April thru June and mid September thru November. This will introduce a striking new color version not presently in the commercial pompon trade.

WIZARD Nov. 10 P
Intermediate pompon. Orange-bronze. Has vigor combined with a stiff, wiry terminal spray. Improves the spray and habit of Climax and the response of Ranger. Tolerates summer high temperatures and retains its vivid orange coloration. Fine for greenhouse or cloth house.

CHEVRON Nov. 10 S-1
An intense bronze pompon. Holds color better than Red Rust or Seneca. Greenhouse, Sept. 15-Nov. 10. Tolerates 54°.

THE TITAN Nov. 10 S-1
Large intense red anemone. Fast disbuds.

BRONZE PANDORA Nov. 10 S-1
Bright coral bronze sport of Pandora. Fast disbuds. Greenhouse, Sept. 15-Nov. 10. Cloth house, Sept. 15-Nov. 1.

CLIMAX Nov. 10 S-5
Intermediate intense orange pompon. Excellent vigor and production. Vivid color stimulates demand for bronze. Greenhouse crops, April 1-Nov. 15. Cloth house, July 15-Nov. 1. Sets a new color standard. Tolerates 56°.

RED CLIMAX Nov. 10 P
Intermediate pompon. Reddish bronze sport of Climax.

COPPERHEAD Nov. 10 S-4
A large coppery bronze decorative. Very satisfactory grown as disbudded sprays or disbudded to a single flower. Fast disbuds. Sprays, May and June, Sept. 15-Nov. 10.

RED HUMDINGER Nov. 11 S-6
An exciting burgundy red sport from Humdinger.


BRONZE MASTERPIECE Nov. 12 S-3
Intermediate pompon. Disspray.

DK. BR. MASTERPIECE Nov. 12 S-2
Dark sport of Br. Masterpiece. Disspray. Brick red with cool finish.

PARAGON Nov. 12 S-3
A large rust red pompon. Sprays, Sept. 15-Nov. 12. Cloth house, Sept. 15-Nov. 1.

AMBERHUE Nov. 14 S-2
Intermediate orange bronze daisy. Green eye. Spray programs, May 15-June 15, and Oct. 1-Nov. 14. Cloth house Sept. 15-Nov. 1. Stalled by high temperature finish.

 New Variety  New Variety Growers Agreement

 Growers Agreement

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Wizard



Red Star (Page 140)

BRONZE & RED POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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11-WEEK VARIETIES

BEAUREGARD SUPREME Nov. 15 S-3

A sport selected from Beauregard. Color remains the same. Size of flower is nearly doubled. Response shifts to the 11-week group. Vigor is increased. Pedicels are longer and spray somewhat more open. Tolerates high temperature well. Extends the Beauregard season into the fall and early spring. Very good late cloth house variety.

RANGER Nov. 15 S-5

Intermediate true orange pompon. A smooth, brilliant new color. Always productive and reliable. Benefited by treatment as a 10-week variety. Tolerant of high temperature for bud development. An outstanding cloth house variety being terminal in its spray formation. Recommended in the greenhouse mid September through November and mid March through June. Cloth house September through October.

BR. JUBILATION Nov. 15 P

Large pompon. A rosewood-bronze sport of Jubilation. Equal in all respects, other than color, to its parent variety. A finishing temperature of 60° or less is required for maximum color retention. A real performer for October thru mid May greenhouse programs as well as late September and October cloth houses. The Jubilations efficiently contribute needed vigor for northern winter pompon programs. They will tolerate lower bud initiation temperatures of 56-60° with uniform response.

MRS. DEWEY Nov. 15 S-1

A heavy petalled deep orange bronze single.

THELMA Nov. 15 S-5

Very brilliant orange scarlet pompon. Sprays March 1-May 1; Sept. 15-Dec. 1.

12-WEEK VARIETIES

FOREVER AMBER Nov. 25 P

Intermediate wide petalled decorative disbud. Retains a velvety smooth amber bronze color. A splendid choice for the fast disbud program from mid November thru April. A real standout in January and February for the northern environment. Comparatively described as an improved winter Luxury.



New Variety



New Variety Growers Agreement

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Variety	Description	Normal Flowering Date	Price
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(Pinch August 3)

RED PRINCETON Nov. 15 S-1

Intermediate rust red decorative.

AMBERCON Nov. 20 P

Intermediate pompon. Warm amber bronze sport of Rusticon. In late fall shadings and natural Thanksgiving programs Ambercon supplements Rusticon with a bright and interesting color.

ILLINI WARRIOR Nov. 20 S-1

Intermediate rust bronze pompon.

LEGAL TENDER Nov. 20 S-2

Intermediate decorative.

RUSTICON Nov. 20 S-4

Intermediate rust red pompon. Greenhouse, Oct. 1-Dec. 1.

ILLINI WAR PAINT Nov. 22 S-3

Large smooth maroon red decorative. Heavy, vigorous growth. Restrict to low temperature finish. Versatile as fast disbud and disbudded spray, Oct. 1-Jan. 1.

OLNURA Nov. 22 S-3

Large apricot buff anemone. Valencia size disbud. Superb color and form. Sharp response. Tall, vigorous, and productive. Disbudded sprays and fast disbud programs, March 1-May 1, and Sept. 15-Jan. 1.

FESTIVAL Nov. 23 S-2

Intermediate single. Short growth habit. Excellent for Thanksgiving.

BRONZE MINUET Nov. 23 S-1

Intermediate pompon.

RUBAIYAT Nov. 23 S-6

Velvety red intermediate formal pompon. Unequaled for October through Christmas flowering. Slowed by high temperatures during bud development. Greenhouse, Sept. 15-Jan. 1.

RED ROLINDA Nov. 23 S-2

Intermediate brick red anemone. Disspray and disbud.

(Pinch August 10)

ILLINI REDWOOD Nov. 25 S-2

Intermediate red pompon. Hard, durable and well formed flower. Fine red pompon for Thanksgiving and Dec.

BRONZE GOLDSMITH Nov. 25 S-4

Large amber bronze decorative. Disspray. Fast disbuds, Nov. and Dec.



Growers Agreement

SEE PRICE LIST ON PAGE 143



Ranger



Beacon (Page 141)

BRONZE & RED POMPONS, DECORATIVES, SINGLE & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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12-WEEK VARIETIES Cont'd)

FALCON	Intermediate reddish bronze pompon.	Nov. 25	S-1
YOLANDA	Intermediate tawny bronze anemone.	Nov. 25	S-1
INDIAN HEAD	Intense red bronze single.	Nov. 28	S-1
APRICOT VALENCIA	Large apricot bronze single. Disbud and dispray.	Nov. 28	S-3
CRIMSON VALENCIA	Large maroon red single. Disbud and dispray.	Nov. 28	S-2
GALAXY	Intermediate bright orange single. Excellent form, color and response. Sprays, Oct. 1-May 1.	Dec. 1	S-5

ORANGE GALAXY	A color sport from Galaxy. Golden orange. Spray programs, Oct. 1-May 1.	Dec. 1	S-1
HOLIDAY	Intermediate red single. Sprays, Nov. 15-April 15.	Dec. 1	S-3
RED EMPRESS	Large disbud anemone. A mauve-red sport of Empress. An essentially fine and appealing fast disbud from November thru April.	Dec. 1	P
CRACKERJACK	Intermediate daisy. The color is described as being a brilliant reddish bronze. Crackerjack is the answer to a red Galaxy. Vigorous and productive, performing well in fast and regular spray programs. Recommended period mid October through April.	Dec. 1	S-4

13-WEEK VARIETIES (Pinch August 17)

RED ENCHANTRESS	Large disbud and dispray anemone. Clear maroon red.	Dec. 5	S-1
BRONZE ENCHANTRESS	Apricot bronze sport. Disbud and dispray.	Dec. 5	S-1
DEBONAIR	Large red pompon. Fine form.	Dec. 5	S-2
IMP. BRONZE SUPREME	Large buff bronze anemone. Disbud. Short.	Dec. 10	S-1
HARLEQUIN	Crimson red intermediate decorative.	Dec. 10	S-2
CHRISTMAS STAR	Intermediate red single. Productive and responsive. Sprays, Nov. 15-March 15.	Dec. 12	S-4

APRICOT MINSTREL	Intermediate pompon. Sport of Bronze Minstrel. Clear apricot bronze. The color display is especially enhanced under artificial light. Its Calumet tone expands the Minstrel family into a color range not presently available in any late variety.	Dec. 3	P
BRONZE MINSTREL	Intermediate coral red pompon. Fine for Christmas.	Dec. 13	S-3
DK. BR. MINSTREL	Reddish bronze sport. Deeper color. Smaller, harder flower.	Dec. 13	S-3
RED MINSTREL	A sport from Br. Minstrel with a lively red glow added.	Dec. 13	S-3
FLAME MINSTREL	Reddish-bronze sport. More vigorous.	Dec. 13	P



New Variety



New Variety Growers Agreement



Growers Agreement

AVAILABLE APRIL 1, 1959





Crackerjack



Illini Homespun


BRONZE & RED POMPONS, DECORATIVES, SINGLE & ANEMONES

Variety	Description	Normal Flowering Date	Price
14-WEEK VARIETIES (Pinch August 24)			
BRONZE RIVIERA	Intermediate orange bronze decorative.	Dec. 15	S-1
CLARET	A brilliant red daisy.	Dec. 15	S-1
TOPAZ	Warm orange bronze single. Sprays, Dec. 1-March 1.	Dec. 15	S-1
BRONZE ALVODA 	Amber-bronze sport from Alvoda.	Dec. 15	P

Variety	Description	Normal Flowering Date	Price
14-WEEK VARIETIES (Pinch August 24)			
CHRISTMAS GREETING	Large red decorative. Fine for Christmas.	Dec. 15	S-5
MERRYMAKER	Intermediate red single. Sprays Dec. 1-March 1.	Dec. 20	S-3
POINSETTIA	Large scarlet red daisy. Tall sprays for Dec.	Dec. 20	S-4
ILLINI HOMESPUN 	Intermediate single. Bright tomato red. Medium height with heavy stem. Best on raised beds. Color enhanced by cool finish. Recommended for retail growers seeking a distinctive and unusual new color.	Dec. 20	P


PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

7-WEEK GARDEN VARIETIES (Pinch July 6)			
SPELLBOUND	Intermediate lavender decorative. Ideal spring pot.	Oct. 1	S-3
MISCHIEF	Small single. Dark purple with contrasting yellow discs produced in profuse abundance on a globose plant. A colorful novelty that lends itself for spring. Also an attractive foreground garden variety.	Oct. 10	S-3
JOYBRINGER	Salmon rose pompon. For borders and pot culture. Spreads well. Short and compact.	Oct. 10	S-2

RASPBERRY ICE 	Intermediate pompon. Raspberry pink. An early and prolific variety, well branched habit that is ideally suited to spring and fall pots as well as the fall garden.	Oct. 10	P
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ALERT	Intermediate intense purple decorative. An impressive color for spring pot plants.	Oct. 14	S-3
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FUCHSIA FAIRY	Small light pink decorative. Compact, globose growth habit similar to the Cushion varieties. Spring plants.	Oct. 14	S-2
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8-WEEK VARIETIES (Pinch July 13)			
CANDYTUFT	Lavender-pink button pompon. Early spring pot plant or as a natural flowering garden specimen.	Oct. 15	P
CUPID	Small pink decorative. Unique dahlia form. Prolific. Dwarf, masses and spreads as a garden variety. Disbud for spring pot plants.	Oct. 15	S-1
MAYFAIR	Intermediate smooth pink single. For cut in the greenhouse. Outstanding production.	Oct. 15	S-1
ACCOLADE 	Intermediate decorative. Glowing shell pink. An ideal outdoor, natural cutting variety, equally valuable in spring and fall spray programs.	Oct. 15	P

CITATION	Intermediate mauve pink pompon. A pot plant disbud. One of the best late garden varieties.	Oct. 15	S-1
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ENTERPRISE	Intermediate deep pink pompon. Excellent substance. Outdoor cut flower.	Oct. 15	S-1
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ELIZABETH HOOD	Large light orchid pink pompon. Garden backgrounds, and for cut in greenhouse.	Oct. 15	S-1
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JEWELL	Small formal pompon. Lavender pink, short and productive.	Oct. 15	S-1
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SEE PRICE LIST ON PAGE 143

 New Variety  New Variety Growers Agreement

 Growers Agreement

AVAILABLE APRIL 1, 1959



Candytuft



Accolade

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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MIRTH Oct. 20 S-2
Intermediate pink single. Especially valuable April 15-Oct. 15. Durable and uniform response in the cloth house.

CAROLYN YOSICK Oct. 20 S-2
Intermediate lavender pink pompon.

9-WEEK VARIETIES (Pinch July 20)

REVEILLE Oct. 25 S-1
Small pink pompon. Initiates and develops at 54°. Popcorn production. Requires low temperature finish. Spray programs.

PINKETTE Oct. 25 S-2
Small pink pompon. Greenhouse May 1-Oct. 25. Cloth house.

ETHRELDA Oct. 25 S-1
Intermediate orchid pink anemone. Dwarf, breaks freely, responds well. Disbud pot plant.


VOGUE Oct. 25 S-1
Large pink single. Beautiful form and substance. Sprays May 1-July 1, and Sept. 1-Oct. 25. Cloth house.

REWARD Oct. 25 S-3
A very productive deep pink single that holds color well. Tolerates 54°. Greenhouse, May 1-Oct. 25, Cloth house.

PINK DOT Oct. 25 S-4
Small pompon. Fine two-tone. Cloth house, July 15-Oct. 25.

GAIL Oct. 25 S-1
Small pink pompon. Selection from Pink Dot that displays an additional overall color intensity. A cloth house variety, July 15-Oct. 25.

BETTY ROSE Oct. 25 S-1
Large light lavender pink anemone.

WAGONWHEELS  Oct. 25 P
Intermediate anemone. Silvery-coral reverse color as displayed by all completely tubular petals. A novel form representing a spoked wheel in appearance. Vigorous growth habit develops tall plants abundantly supplied with spray masses of perfect florets. Provides a uniquely different cut flower pom in both fast and regular spray programs from April thru October.



New Variety



New Variety Growers Agreement



Growers Agreement


AVAILABLE APRIL 1, 1959

Variety	Description	Normal Flowering Date	Price
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8-WEEK VARIETIES (Cont'd)


MARY McARTHUR Oct. 23 S-1
Small deep coral pink pompon.

PRELUDE Oct. 24 S-1
Intermediate coral pink single. Requires cool finish.

ROSE GAIETY  Oct. 25 P
Intermediate coral rose single. Sport of Gaiety. A beautiful pastel color best grown in the cool finishing periods of spring and fall.


THOMAS JOHNSON Oct. 28 S-2
Large decorative. Deep orchid pink. Ideally suited to the fast disbud programs, May and June, also Oct. 15-Dec. 1.

GLAMOUR  Nov. 1 P
A formal pompon disbud of intermediate size. Lavender pink with intensified centers. Spreading and stocky growth habit render it useful primarily as a pot plant variety from March thru November. MEDIUM TREATMENT.

HANDSOME  Nov. 1 P
Intermediate decorative pom. Lavender pink. Color, size, and form bear a striking resemblance to Bluechip. Superb natural spray cut pom from mid April thru mid November. Is inherently as low temperature tolerant as Bluechip, 52° minimum, for bud initiation. Produces slightly smaller flowers but more of them. A highly versatile pompon.

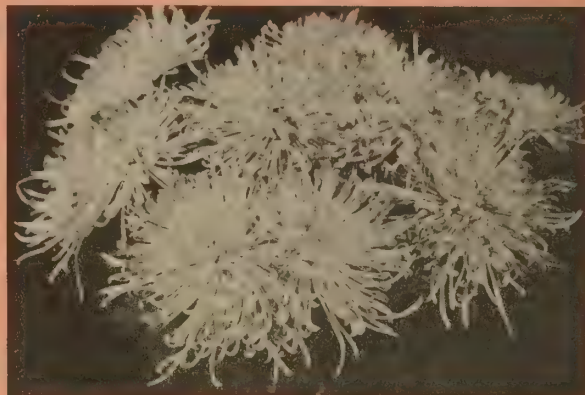
BLUECHIP Nov. 1 S-8
Intermediate luminous pink decorative. Recommended in the greenhouse, May 1-Nov. 15. Cloth house, July 15-Nov. 1. Top notch pink. Tolerates 54°.

PINKCHIP Nov. 1 S-4
Intermediate decorative. A flattering light pink selection of Bluechip. Can be grown whenever Bluechip is recommended. Greatest color difference is noted when finished at 60° or less. Greenhouse May 1-Nov. 15. Cloth July 15-Nov. 1.

PEACH CHIP  Nov. 1 P
Intermediate decorative. Bright peach pink. With cool finishing temperatures of spring and fall, the color is unmatched for brilliance and harmony. Has all the vigor and temperature tolerance of Bluechip. A beautiful supplement to Bronzechip especially in the spring and for cloth house programs.



Handsome



Bridesmaid (Page 142)

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Cont'd)

DARKCHIP Nov. 1 P
Intermediate dark lavender pink sport of Bluechip. Color similar to that of Pennant but brighter. In the spring months, growth is normally 3-4" taller than Bluechip and 3-4 days later to flower. Can be flowered whenever Bluechip is grown, May thru mid November as a greenhouse spray. Like all the rest of the Bluechip sports, the color becomes enhancingly luminous under normal incandescent light.

DK. PINK BUCKINGHAM Nov. 1 S-1
Intermediate intensified pink single.

LILLIAN DOTY Nov. 1 S-1
Large light pink pompon. Disspray and disbud.

TEMPO Nov. 3 S-3
Intermediate deep pink decorative. Recommended in the greenhouse, May 1-Nov. 15, and cloth house, Sept. 15-Nov. 1.

10-WEEK VARIETIES (Pinch July 27)

MERMAID Nov. 5 P
Intermediate pompon disbud. Medium lavender pink with an intense tone on tone center contrast. A dwarf version of Portrait with decidedly better breaking action and spreading habit. Unfailing as a year round pot variety using *SHORT TREATMENT*. High temperature color retention equals that of Blue Ribbon. Fine foliage with smart, formal form.

SOUTHDOWN PINK Nov. 5 P
Intermediate duplex disbud of Valencia size and form. Delicately shaded pink close to a true light pink carnation. Tolerates 56° minimum temperatures. Develops equally as well during the summer periods but 60° or lower is required for best color expression.

PARISIENNE Nov. 5 S-3
Intermediate shell pink single. The color is as close to true pink as exists in the chrysanthemum. Sprays, Sept. 15-Nov. 15.


DELIGHT Nov. 5 S-4
Intermediate pink daisy. Productive, durable, striking color, and fresh appearance. Spray crops May 1-July, and Sept. 15-Nov. 15. Cloth house, July 15-Nov. 1. Improved with center bud removal.

PORTRAIT Nov. 8 S-8
Large lavender pink pompon. A versatile variety. Tolerates 54° Responds well to partial disbudding. Excellent year round pots. Greenhouse, March 1-July 1, and Sept. 15-Nov. 15. Cloth house, July 1-Nov. 1. Disbuds, Sept. 15-July 1. For sprays height is improved by addition of one long day week.

PINK PORTRAIT Nov. 8 S-4
Large light lavender pink pompon. Portrait sport with an identical growth habit. A useful supplement for Portrait during periods of the year when a shade lighter than Portrait may be desired.

PROFILE Nov. 8 P
Large pompon. Another distinctive color variation to add to the increasing number of beautiful Portrait sports. Form is more decorative. Growth, vigor and breaking habits are as good if not better than Portrait. Recommended for pots and spray programs from March thru December. Summer color is best with some shade protection, but when finished cool, maximum color expression is dazzling among the Portraits.

 New Variety  New Variety Growers Agreement

 Growers Agreement

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Magic (Page 129)



Mermaid

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES


Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

DARK BULKELEY Nov. 8 S-1
Intermediate formal deep lavender pompon.

CRITERION Nov. 8 S-7
Large pink decorative with a vigorous, compact growth habit. A new and valuable pot plant variety, Sept. 1-July 1. Also a fine cut flower variety, May 1-July 1; Sept. 15-Nov. 15, with one extra long day week and center bud removed. Tolerates 54°.

FROLIC  Nov. 10 P
Intermediate pompon. Bright lavender pink. Short habit for all sizes of pots. Breaks, spreads and responds in a fool-proof manner. Ideally adapted for natural spray pot programs. Retains color well. For growers who do not disbud their pot plants Frolic should fit the bill.

PINK DELUXE  Nov. 10 P
Medium to large lavender pink disbud. A significant achievement in the development of flower size within the pinks available for pots. Four to five inch decorative type flowers are produced on a Bonnafon type chassis. Heavy stems, short internodes, with free and wide-angled breaking action. Can be efficiently flowered in pots 12 months of the year with either MEDIUM or TALL TREATMENT. Color is best preserved during the summer months when developing flowers are given some shade protection. A variety for those who seek the best.

ILLINI ACCENT Nov. 10 S-1
Intermediate to large decorative. Deep mauve purple. Stocky growth habit. Will tolerate 52° for initiation and development. Full color retention requires less than 60° finishing temperatures. A versatile responsive variety that can be recommended for spray programs in the cloth house mid September through October; in the greenhouse mid September through November. Pot programs with medium treatment mid September through mid June with cool finish. Low temperature tolerance and intense color are its distinctive qualities.

PLUM Nov. 10 P
Large silvery lavender duplex spider. Petal completely tubular and partially incurved. A close counterpart to the old Vivacious Lady. Equal to the flawless dependability and superb growth habit of Luyona in a year-round fast disbud program. This is another salient contribution to enlarge the range of variety for disbuds.

BONNIE Nov. 10 S-4
Intermediate pink pompon. Improves Pinkette form and color. Formal and hard. Pink Igloo. Spray crops, May 15-July 1; Sept. 15-Nov. 15. Cloth house, July 15-Nov. 1. Tolerates 56°. Delayed by excessive high temperature during bud development.

PENNANT Nov. 10 S-5
Intermediate deep pink pompon. Recommended in the greenhouse, April 1-Nov. 15. Cloth house, July 15-Nov. 1.

CADENZA Nov. 10 S-1
Large anemone disbud. Lavender pink, vigorous and responsive. Tolerates low temperature (56°) for bud initiation and requires 60° or less for best finishing results. Vastly improves the quality and growth of Enchantress as a fast winter disbud, Oct. 1-June 1.

PERSONALITY Nov. 10 S-8
A large luminous-pink incurved pompon.. Tolerant of 56° for bud initiation and development. Adds color and form improvement to Queen of Pinks as a pot plant, March 1-July 1; Sept. 1-Jan. 1, and single pinch. Uniquely favored with short internodes and large foliage which complements it when grown as a pot plant.

DK. PK. PANDORA Nov. 10 S-1
Intermediate dark pink decorative. Selection from Pandora. Sprays Sept. 15-Nov. 10. Fast disbud programs. Cloth house Sept. 15-Nov. 1. Requires 60° initiation.

SALMON PANDORA Nov. 10 S-1
Intermediate salmon decorative. Selection from Bronze Pandora. Unparalleled color for fall cloth house and greenhouse.

PANDORA Nov. 10 S-3
Large luminous pink decorative.

THYRA Nov. 10 S-1
Intermediate deep lavender pompon.



New Variety



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Growers Agreement

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Cheerful



Illini Accent

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

SCINTILLATION Nov. 10 S-2
Intermediate deep pink pompon. Very vigorous and heavy. Superb cloth house variety, Sept. 15-Nov. 1. Greenhouse, Sept. 15-Nov. 15. Requires 60° bud initiation.

LINDA LOU Nov. 10 S-2
Intermediate light lavender pink anemone. Responsive. Tolerates 54°. Greenhouse, April 1-Nov. 10. Cloth house, July 15-Nov. 1.


DK. LINDA LOU Nov. 10 S-2
Intermediate deep lavender pink anemone. Very productive.

HUMDINGER Nov. 10 S-7
Large luminous violet purple, formal pompon. A valuable disbud pot plant. Cloth house, July 15-Nov. 1. Tolerates 54°. Strong consumer appeal.

MASTERPIECE Nov. 12 S-4
Intermediate lavender pink pompon. Disspray. Tolerates 54°. Greenhouse.

ROSE MASTERPIECE Nov. 12 S-3
Intermediate light lavender pink pompon. Disspray. Finish cool. Greenhouse, April and May, also Sept. 15-Nov. 12.

MEMORIAL Nov. 12 S-1
Intermediate pink anemone.

CHEERFUL  Nov. 12 P
Intermediate natural spray pompon. Lavender pink with tone on tone contrast. Best described as a "Delmar" flower on a "Delight" chassis. Recommended in the greenhouse spray program from mid April thru mid December. An easy variety to cut and handle. Sprays usually terminal.


11-WEEK VARIETIES (Pinch August 4)

TAFFETA Nov. 15 S-4
A two-tone pink pompon. Greenhouse, March and April, Oct. 1-Dec. 1. Best with cool finish.

DARK TAFFETA Nov. 15 S-2
Dark pink sport selected from Taffeta. Retains more color than Taffeta when fading becomes a problem. Fine for the late cloth house and early spring programs.

DARK NORMA Nov. 15 S-1
Large dark lavender anemone. Disbud. Fast crop, Nov. 1-April 1.


RHYTHM Nov. 15 S-1
Smooth light pink intermediate daisy. Characterized by extra vigor and fast rate of growth. As a result, efficiency is increased by provided 12-week timing. Recommended for greenhouse programs from October through mid December and March through April.

CHARM  Nov. 15 P
Intermediate anemone. Bright pink. Short habit, good spread. A pink version of Barbara Fuller for pots. Uniform response. Flowers with and requires the same treatment as Bonn DeLuxe.


JUBILATION Nov. 15 S-5
Large pompon. Masterpiece pink. Growth is clean and strong with sharp responses. Jubilation is the best product to date that meets the need for a late fall, early winter and spring Bluechip. Spray and habit are closely identical. Tolerant of 56° for initiation and development. Recommended for October through mid December and March through mid May greenhouse spray programs.

ILLINI SPRINGTIME Nov. 15 S-1
Intermediate pink single. Outstanding color and vigor.

MAGIC Nov. 15 S-1
Intermediate anemone. Dark orchid pink with gold tipped cushions. Rapid, vigorous growth. In the greenhouse it combines flawless performance with production and striking color during October through December and March through April. Tolerant of 56° for initiation and development.

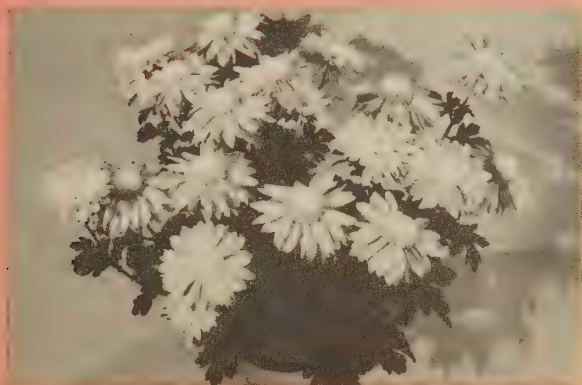
PIONEER  Nov. 15 P
Large Pompon. Luminous shell pink. Essentially for Bantamum and fast disbud crops. Its principal assets are its vigor, consistently dependable response, low temperature tolerance and high production. A true home-sized disbud that is a real Pioneer for Bantamum crops.

 New Variety  New Variety Growers Agreement

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SEE PRICE LIST ON PAGE 143



Charm



Jubilation

PINK POMPONS, DECORATIVES, SINGLE & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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11-WEEK VARIETIES (Cont'd)

VEDOVA Nov. 15 P
Extra large Valencia size, anemone disbud. Pastel shade of a lustrous lavender pink with small green-tipped cushions. Color is best expressed in a cool 60° environment. The performance, beauty, and quality of this variety establishes a new precedence from October thru May flowering periods either as a fast or regular disbud, or a pot variety using TALL TREATMENT.

STACCATO Nov. 20 P
Intermediate formal pompon. Lavender pink. Much like an 11-week Minstrel in form, but reliably responsive all through the winter from October thru April in the regular spray program. Tolerates 56° minimum. Flower durability lends itself well to clothhouse use. Color brightness best retained at night temperatures of 60° or below. A productive and profitable addition to the presently small group of popular 11-week pinks.

GRAND SLAM Nov. 20 S-2
Brilliant silvery pink daisy.

ALMEGA Nov. 20 S-4
Large silvery pink pompon. Form, color and substance excellent. Greenhouse. Fast disbuds, Sept. 15-May 1. Color is unexcelled in its season.

DARK ALMEGA Nov. 20 S-2
Dark lavender pink sport selected from Almega. Habit and performance are identical to the parent variety.

MARION BREEDON Nov. 20 S-1
Intermediate to large anemone. Smooth lavender-rose pink. Achieves a new standard for good form and color in anemones. Vigor, production and quality greatly improve the Pink Long Island Beauty series for fast disbud and disspray programs. Recommended season is mid September through October in the cloth house; mid September through December in the greenhouse regular spray and fast disbud crops.

PINK L. I. BEAUTY Nov. 20 S-1
Large light pink yellow cushion anemone. Disspray and disbud.

DK. PK. L. I. BEAUTY Nov. 20 S-1
An intensified color selection of Pink L. I. Beauty. Disspray and disbud.

VENOYA Nov. 22 P
Extra large lavender-pink anemone disbud. Strikingly similar in growth to Vedova, Venoya flower develops a substantially larger green-eyed cushion with greater depth, in addition to flowering 5 to 7 days later. Fast and regular disbud programs, and pot plant programs using TALL TREATMENT from October thru May.

BLUE SKIES Nov. 23 P
Large pompon. Portrait pink. Develops a larger flower with more vigor than Delmar. Improved by early removal of center buds. A smart, impressionable flower that excels in color and tolerates a cool 60° temperature for fall, winter and spring crops.

MINUET Nov. 23 S-2
Small true pink pompon. Excellent form.

ILLINI FORMAL Nov. 23 S-2
Intermediate lavender pink pompon. Very novel form with tubular rays.

CELEBRITY Nov. 23 P
Intermediate decorative. Color is a discriminating shell pink. Objectively bred and selected for a larger sized flower and a more lucidly clear pink color than Almega provides. Substantially increased vigor renders this a real prize for greenhouse sprays from mid October thru mid April. Production competes favorably with any outstanding late variety for winter flowering in the north. Maximum color needs a cool 60° finish.



New Variety



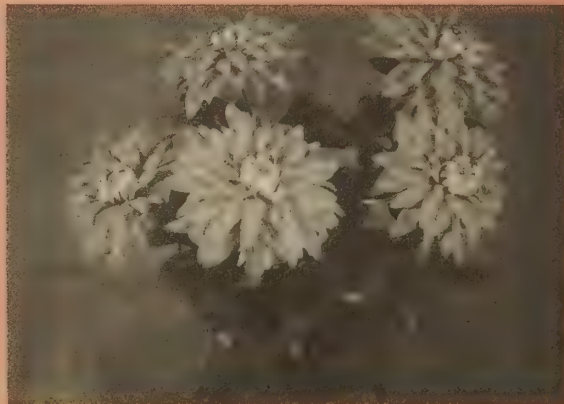
New Variety Growers Agreement



Growers Agreement

AVAILABLE APRIL 1, 1959

Blue Skies



Working Scarlet (Page 141)

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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12-WEEK VARIETIES (Pinch August 11)


DELMAR Nov. 25 S-6
Intermediate pompon. Almega pink. Vigorous, productive, and distinctive dot color contrast. Improved Almega habit. Spray crops, March and April; Sept. 15-Jan. 1.

ILLINI ROSEGLOW Nov. 25 S-1
Intermediate pink pompon. Requires low temperature (max. 55°) finish. Productive. Best dissprayed. Greenhouse in March and natural season.

PRINCESS Nov. 25 S-2
Small pink pompon. Hard and durable.

BEAUTIFUL LADY Nov. 25 S-3
Large anemone. Disbud.

DESIRE  Nov. 25 P
Intermediate anemone. Delicately colored light pink. High crowned cushions. A forerunner to faster, and more efficient winter varieties for northern greenhouses. Recommended as a fast spray from November thru mid April. Color retention demands a cool 60° finish.

LEGEND  Nov. 25 P
Intermediate formal pompon. True lavender pink. Fills a real gap in winter programs for a good pink Icecap or Corsair. Its flower is equally as beautiful as Minstel. Response is uniform all winter through April. It is hard, durable and will ship well.

VALENCIA Nov. 28 S-3
Large light lavender pink single. Disbud and disspray.

DARK VALENCIA Nov. 28 S-3
Large lavender pink single.

DUBONNET VALENCIA Nov. 28 S-1
Dubonnet sport of Valencia.

ORCHID VALENCIA Nov. 28 S-1
Large single. Semi-anemone cushion.

SALMON VALENCIA Nov. 28 S-1
Large single. Outstanding color.

NUGANO Nov. 30 S-1
Intermediate pompon. A quality flower. One of the most important pink pompons for this season. Greenhouse, Oct. 1-Dec. 1. Add an extra week to improve height.

HERITAGE Dec. 1 S-1
Intermediate formal dark pink pompon. Tall and vigorous.

EMPRESS Dec. 1 S-1
Large disbud and disspray anemone. Deep magenta pink. An Enchantress seedling that combines increased vigor with faster, more uniform responses. Performs well in the fast disbud program December through April.

13-WEEK VARIETIES (Pinch August 18)

EMINENCE Dec. 5 S-2
Intermediate daisy. Bright lavender pink. A 60° variety well suited to northern winter conditions. Very vigorous and should therefore be treated as a 14-week variety.



ENCHANTRESS Dec. 5 S-2
Large lavender pink anemone. Disbud and disspray. Fast disbuds, in Dec.


DK. ENCHANTRESS Dec. 5 S-1
Large deep pink anemone. Disbud and disspray. Fast disbuds in Dec.

PINK SNOWDROP Dec. 8 S-2
Smooth light pink sport from Snowdrop. Growth habit and response are identical to the parent variety. Mid November through mid March spray programs.

DEBUTANTE Dec. 10 S-2
Intermediate pink single with color similar to that of Valencia. Best at lower temperature finish. Sprays Nov. 15-March 15.

PINK SUPREME Dec. 10 S-1
Large pink anemone. Habit resembles Imp. White Supreme. Tall disbud.

 New Variety  New Variety Growers Agreement

 Growers Agreement

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SEE PRICE LIST ON PAGE 143



Legend





Prom

PINK POMPONS, DECORATIVES, SINGLES & ANEMONES

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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13-WEEK VARIETIES (Cont'd)

PROM 		Dec. 13	P
Intermediate pompon. Smooth, intensified Delmar pink. Fine vigor and strong stem for winter cut flower programs. Very close to a winter Portrait. Uniform response in cool 60° units.			
IMP. DARK SUPREME		Dec. 13	S-1
Large pink anemone. Short. Late disbud.			
GAY MINSTREL 		Dec. 13	P
Intermediate pompon. Sport of Minstrel but a lighter, livelier tint of Minstrel pink.			

MINSTREL		Dec. 13	S-4
Intermediate lavender pink pompon.			
DK. PK. MINSTREL		Dec. 13	S-4
A clear, clean deep mulberry shade of Minstrel.			
IMP. PK. MINSTREL		Dec. 13	S-3
Its color resembles that of Pink Dot and it does not deteriorate rapidly with maturity. Imp. Pk. Minstrel has form, substance and color.			

14-WEEK VARIETIES (Pinch August 24)


RIVIERA		Dec. 15	S-3
Intermediate luminous pink decorative. Requires 60° initiation. Finish cool. Sprays, Dec. 1-March 1.			
ROSALIND		Dec. 20	S-1
Intermediate light lavender single. Tolerates 56°. Sprays, Dec. 1-March 1.			
DEFIANCE		Dec. 20	S-2
Intermediate decorative. Sprays, Dec. 1-March 1. Requires 60° initiation cool finish.			
MEDALLION		Dec. 20	S-2
Intermediate lavender rose pompon.			

ROSE MEDALLION		Dec. 20	S-1
Rose pink sport of Medallion.			
LYNDA McLANE		Dec. 25	S-2
A late pink pompon with a habit that does not produce blind growth and a color that is highly acceptable. Late natural crops.			
ALVODA		Dec. 25	S-5
Large smooth Portrait pink decorative. Dec. 1-March 15. Free growth. Habit, size and color improve Defiance, Debutante and Riviera.			
DARK ALVODA 		Dec. 15	P
Large decorative. Dark Minstrel pink. Sport from Alvoda.			


WHITE STANDARDS


8-WEEK VARIETIES (Pinch July 13)

WHITE PINK CHIEF		Oct. 15	S-6
Intermediate pure white incurve. Selection from Pink Chief. Responds well under high temperatures. Standard and fast disbud programs May 1-Oct. 15.			
SILVER SHEEN		Oct. 20	S-5
Intermediate incurve. September shadings and natural under glass. Tolerates 54°.			

WHITE CHIEF No. 2 		Oct. 20	S-2
White incurved standard. A selection from White Chief for improved response, vigor and flowering uniformity. Flowers with Yellow Chief. This variety is quite dissimilar and has no known relationship to White Pink Chief.			
CHRISTINA		Oct. 23	S-1
Small incurve. Used for pots.			

9-WEEK VARIETIES (Pinch July 20)

SILVER QUEEN		Oct. 25	S-2
White Fuji mum. Stem improves Rayonnante. Valuable for spring and fall programs.			
MARBLEHEAD		Oct. 25	S-4
Medium clear white incurve. Durable and responsive. Best early white for fast crop program May 1-Dec. 1. Standards Sept. 15-Oct. 25.			
QUICKSILVER 		Oct. 25	P
Large decorative. Pure white. More durable, uniform and prolific than Wilson's White and at least a week earlier than Oregon. Quicksilver achieves a new standard for large, showy pots averaging five plus breaks and opening all flowers very evenly. Its fast, uniform response makes for an efficient and profitable variety in any pinched or single stem or pot program.			

GRANITE STATE		Oct. 25	S-4
Large white disbud pompon. For pots Oct. 1-July 1.			
MRS. ROBINSON		Oct. 25	S-2
Intermediate white incurved standard. Beautiful form and heavily petalled. Popular All Saints Day standard as a southern field and cloth house variety.			
AMBASSADOR		Oct. 25	S-4
Large ivory incurve.			
MOONTIDE 		Oct. 28	P
Medium to small ivory-white standard. Develops into a tightly incurved ball form. More accurately defined in appearance as an over-sized Luna flower. Fast growing variety. Highly recommended as a fast disbud from March thru December. Withstands minimum of 56° in the spring for bud initiation.			



New Variety



New Variety Growers Agreement



Growers Agreement

WHITE STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Cont'd)

PATTERSON'S WHITE Nov. 1 S-3

Large white semi-incurve. Selection from Wilson's Yellow. Principal advantages over Wilson's White are its greater resistance to blackening of centers. Fine for single stem pots in spring, summer and fall.

POITEVINE SUPREME Nov. 1 P

Intermediate white incurve. Wilson's White restyled and formalized. It is characterized by a completely incurved form. Petals are broad, incurved and not reflexed or twisted. Habit is a little more compact. A very fine single stem pot variety.

WILSON'S WHITE Nov. 1 S-7

Intermediate pure paper white pot plant variety for March 1-Dec. 1.

MALOU Nov. 1 P

Intermediate incurve. Chalk white. Extremely short habit and strictly a pot variety. Pinched crops require high light environments. Best as a single stem pot where its beautifully rounded, incurved form has unlimited appeal. Fine also for small units grown single stem in 3" pots. In pots it solves the height and uniformity problems of Indianapolis White during its recommended period.

THEMESONG Nov. 1 P

Medium semi-incurve ivory-white standard. Possesses Good News substance and durability, but slightly smaller in size. Adapted especially for summer light, high temperature periods and intolerant of less than 60° for initiation. Vigor often surpasses that of Good News in mid-summer. Very resistant to petal burn. Recommended as a fast disbud and medium sized standard in summer programs.

QUEEN'S LACE Nov. 1 S-5

Spider. Standard program March 15-Nov. 15. Pots Sept. 15-July 1. Fast disbuds April 1-Nov. 15.

ALBATROSS Nov. 1 S-7

Large incurve. Tolerates 54°. Important west coast variety. Greenhouse Sept. 15-Nov. 15.

WHITE MARY GARDEN Nov. 1 S-2

White sport from Mary Garden. Spider. Tinges at low temperatures. Greenhouse May 1-Nov. 1.

LUNA Nov. 1 S-4

Small light cream incurve. Tolerates 54°. Compact and uniform. Versatile pot plant variety throughout the year.

10-WEEK VARIETIES (Pinch July 27)

GIANT BETSY ROSS Nov. 5 S-8

Large incurved sport of Betsy Ross. Requires high temperatures for initiation and development. Standard programs June 15-Nov. 5.

WHITE RAYONNANTE Nov. 5 S-5

Spider. Straight tube.

NIGHTINGALE Nov. 5 S-3

Chartreuse green spider. Very popular West Coast novelty.

INDIANAPOLIS WHITE Nov. 5 S-9

Large incurve. Tolerates 54°. Standards Sept. 15-June 15. Disbuds the year round.



New Variety



New Variety Growers Agreement



Growers Agreement

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WHITE STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

IMP. IND. WHITE Nov. 5 S-8

Selected for, and provides a very significant reduction of winter quilling in comparison with the original parent variety. During the winter, depth of flower is greater and incurvature improved. Proven to be devoid of pink tinges at low finishing temperatures. Slight ivory overcast until full maturity. This is

IND. WHITE No. 3  Nov. 5 P

Imp. Ind. White it does not quill under winter low light and temperature conditions. Noticeably larger than the Improved, of whiter color, and superior in its form retention and depth of white color, and superior in its form retention and depth of flower. It is, by all measurements, the best selection to date from Indianapolis White. Dependable Bantamum.

OREGON Nov. 5 S-9

Large white semi-incurve. Exclusively a pot plant variety. Stronger habit, larger and more beautiful flower than Wilson's White. Compact, short, rigid growth and vigorous breaking action. Flowers develop most rapidly when finished at 60° or less. Will rapidly become the favorite white mum for pots. Does not blacken its centers during the winter months. Also excellent for single stem pots in recommended period.

OREGON TRAIL  Nov. 5 P

Large semi-incurve. Light yellow resembling the variety Luna in color. Sport from Oregon. Has the same habit and response as its popular parent. Color is a smooth, pleasing shade that is quite resistant to fading, Superb single stem variety in recommended period.

WHIRLWIND Nov. 5 S-3

Large pure white reflexed standard. Requires high summer temperatures for best response and development. Supplement for Betsy Ross. More durable, strong growth and heavy petalage. Shaggy, interesting new form. Standard programs July 1-Nov. 5.

SUSAN LEIGHTON Nov. 6 S-2

Large ivory white spider. Standard Oct. and Nov. Intolerant of low light intensities. Finish cool. Supplements Queen's Lace with a much showier flower.

SENTINEL Nov. 8 S-3

Intermediate ivory white tightly incurved standard. Vigor and habit resembles Mefo. Hard flower, durable and tolerant of heat in summer. Requires high light intensities. Standard and fast disbud programs April 1-Nov. 8. A more durable shipper to supplement Betsy Ross in the summer program.

JEAN ELIZABETH Nov. 10 S-2

Large semi-incurve sport of Orchid Queen.

CRYSTAL QUEEN Nov. 10 S-6

A sport of Orchid Queen that improves Jean Elizabeth in clarity of color and compactness of flower. Standards Sept. 15-July 1.

WHITE POCKETT Nov. 10 S-1

Large incurved exhibition.

MEFO Nov. 10 S-8

Large ivory incurve. Tolerates 56°. Standards Sept. 15-June 15.

MONUMENT Nov. 10 S-4

Intermediate ivory incurve.

WHITE YAMANE Nov. 10 S-2

Large disbud spider. Pure white. A West Coast variety.

FRED SHOESMITH Nov. 12 S-8

Large white incurve. A very late 10-week or early 11-week variety. Relatively short, stocky growth that should receive 10-week treatment to obtain desired stem length. Markedly excels the size and form of winter Ind. White, and usually flowers about 7 days later in either a lighted or shaded program. Maximum perfection is obtained in the November thru mid June standard programs.



New Variety

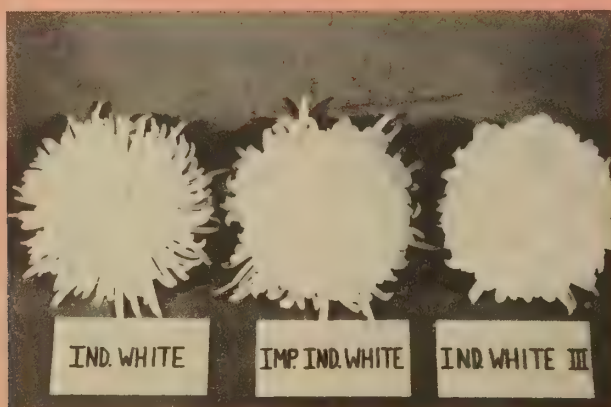


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WHITE STANDARDS

Variety	Description	Normal Flowering Date	Price
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11-WEEK VARIETIES

STERLING		Nov. 15	S-2
Large pure white incurve.			
MARKETEER		Nov. 18	S-5
Intermediate chalk white incurve.			

12-WEEK VARIETIES

WHITE PETER JOHN		Nov. 25	S-2
Large clear white decorative. Standard and fast disbud Nov. 1-Jan. 15. Intolerant of low temperature. 60° minimum for bud initiation; 55° for bud development.			
CHATTANOOGA		Nov. 25	S-5
Large pure white incurve. Standard Nov. 1-April 1.			
DECEMBER GLORY		Dec. 1	S-4
Intermediate incurve. Valuable for natural crops.			
MARGARET MOELLER		Dec. 3	S-3
Intermediate incurve. Short habit.			

Variety	Description	Normal Flowering Date	Price
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(Pinch August 3)

WHITE FRICK		Nov. 20	S-1
Intermediate incurve. Short habit. Tinges pink at low temperatures.			
INDIANA MARKET		Nov. 20	S-1
Intermediate incurve.			

(Pinch August 10)

WHITE MISTLETOE		Dec. 5	S-1
Intermediate tall incurve. Best results require 50° finish.			
SMITH'S WHITE		Dec. 10	S-6
Intermediate semi-incurve.			
DECEMBER WHITE		Dec. 15	S-3
Intermediate incurve.			
SNOWLINE		Dec. 20	S-2
A large showy white flower. Requires 60° to initiate and develop buds uniformly.			

YELLOW STANDARDS

8-WEEK VARIETIES (Pinch July 13)


HARVEST GOLDEN		Oct. 15	S-3
Large deep golden yellow decorative. Very colorful, responsive. Fast disbuds April 1-Nov. 1.			
GOLD LODGE		Oct. 15	S-2
Intermediate lemon yellow reflex. Garden and greenhouse disbud.			
CELESTRA		Oct. 15	S-2
Small deep lemon yellow semi-incurve. Fast disbuds May 1-Nov. 1.			

YELLOW CHIEF 		Oct. 20	P
Lemon yellow incurve. Sport of White Chief. Short habit of growth.			

SUNBURST		Oct. 20	S-1
Intermediate golden yellow reflexed decorative. Vigorous and prolific. Pots and fast disbuds May 1-Nov. Tolerates 54°.			
MRS. KIDDER		Oct. 20	S-4
Large golden yellow incurve.			
BUTTERBALL		Oct. 20	S-2
Intermediate deep lemon incurve.			

BLAZING GOLD		Oct. 23	S-6
Intermediate semi-incurve. Valuable for spring pots. Tolerates 54° with slight bronzing. Standards and fast disbuds April 1-Nov. 1.			

9-WEEK VARIETIES (Pinch July 20)

MECCA 		Oct. 25	P
Large incurved standard. Deep lemon yellow. Tall, vigorous growth habit well suited to standard and fast disbud programs but should not be crowded. Withstands burning. Its tight, beautifully incurved form is reminiscent of Penrod. A useful supplement to the White Pink Chief series.			

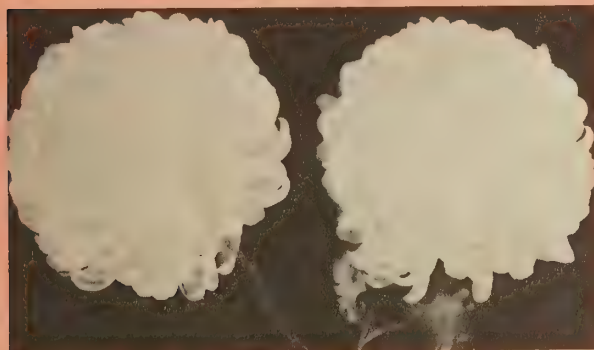
YEL. MARBLEHEAD		Oct. 25	P
Medium lemon-yellow incurve. Sport of Marblehead. Recommended for standard and fast disbud programs. The Marbleheads require the high light, high temperature combination to achieve maximum stretch and flower size.			

 New Variety  New Variety Growers Agreement

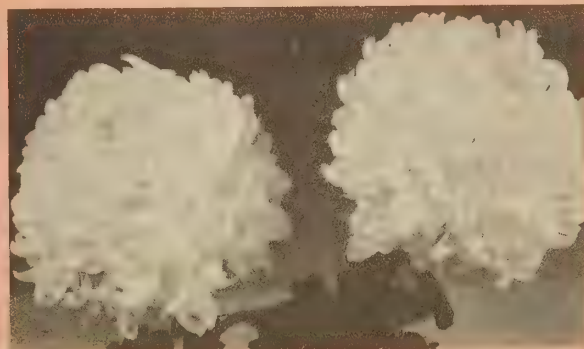
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Gordon Wells




Yellow Shoesmith

YELLOW STANDARDS


Variety	Description	Normal Flowering Date	Price	Variety	Description	Normal Flowering Date	Price
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9-WEEK VARIETIES (Cont'd)

MRS. WOLFE 		Nov. 1	P
Large incurve. Lemon yellow. Of Yellow Chattanooga size and color. Almost an exhibition of short habit and remarkable response uniformity. Its place is exclusively in single stem pot culture where 6-8" blooms are obtained. Does not burn. Mrs. Wolf provides greater dependability of performance as single stem pot specimens than previously had with Ind. Yellow.			
SUNGLOW		Oct. 25	S-2
Large golden yellow incurve.			
GEORGIA		Oct. 25	S-3
Intermediate dark yellow incurve. Dwarf and compact. Improves Blazing Gold in the pot plant program. Intolerant to low light intensities. Tolerates 54°.			
YELLOW AMBASSADOR		Oct. 25	S-2
Intermediate light lemon yellow incurve.			
LUYONA		Oct. 25	S-5
Large yellow spider mum with quality blooms and fine stem. Standard and fast disbud program throughout the year.			


YELLOW LACE		Nov. 1	S-5
Lemon yellow sport of Queen's Lace. Standard program March 15-Nov. 15. Pots Sept. 15-July 1. Fast disbuds April 1-Nov. 15.			
GOLD LACE		Nov. 1	S-5
Golden yellow sport of Yellow Lace.			
YEL. ALBATROSS		Nov. 1	S-4
Large incurve. Lemon-yellow sport of Albatross. Primarily a West Coast variety possessing better than average shipping qualities. Suitable for mid September thru mid November standard programs.			
WILSON'S YELLOW		Nov. 1	S-4
Yellow sport from Wilson's White.			
GOOD NEWS		Nov. 1	S-8
Large deep yellow incurve. Tolerates 54°. Outstanding summer and fall variety. Standard April 1-Nov. 1.			
YELLOW IVANHOE		Nov. 1	S-3
Golden yellow sport. Fast disbuds the year around.			

10-WEEK VARIETIES (Pinch July 27)

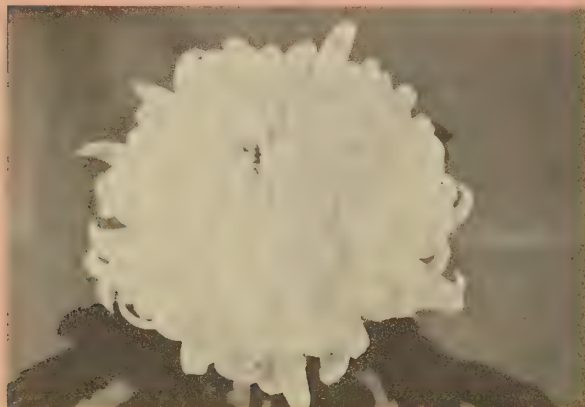
EXPLORER 		Nov. 5	P
Large incurved standard. Deep yellow. A Good News seedling with all its low temperature tolerance, improved vigor and uniformity. A faithful performer from late September through early July in non-cooled greenhouses in Ohio. Excessively high temperature finishes cause some flower malformation, but superb with cool finish. Petallage has substance and is resistant to burning. One of the most promising of recent standard introductions that performs well between the period when Indianapolis starts to burn and the period when Good News is successfully flowered.			

CAPRICORN 		Nov. 5	P
Large decorative standard. Color of Yellow Delaware. Essentially a pot variety, and the first good seedling to attain the objective of full flower closure on Yellow Delaware. Retains the Delaware habit, but is more uniform and responsive at high temperature periods. Its large flower is well suited for both pinched and single stem pots. While it will bronze if finished cold, it is a top ranking yellow for high light and high temperature periods.			
IMP. YEL. RAYONNANTE		Nov. 5	S-4
A clear yellow selection of Yellow Rayonnante with increased size and improved form.			

 New Variety  New Variety Growers Agreement

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Explorer



Mrs. Wolfe


YELLOW STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

CHAIRMAN Nov. 5 S-3
Large golden yellow decorative. Standard and fast disbud programs May 1-Jan. 1.

IND. CREAM  Nov. 5 P
Large incurve. Cream yellow. Sport from Ind. White. Taller and more vigorous than Ind. Yellow and a few days slower response. At a peak of use and value in spring and fall standard, fast disbud and bantamum programs.

IMP. INDIANAPOLIS YELLOW Nov. 5 S-9
Light golden yellow selection of Ind. Yellow. Displays best form for yellow Indianapolis varieties in winter crops. Standard Sept. 15-June 15. Disbuds the year around.

INDIANAPOLIS YELLOW Nov. 5 S-8
Large lemon yellow incurve.


INDIANAPOLIS GOLD Nov. 5 S-4
Large incurved standard. Color intensifies the present Dark Ind. Yellow. Same growth habit and flower size.


DARK INDIANAPOLIS YELLOW Nov. 5 S-6
Slightly shorter in growth habit than Ind. Yellow. Best response. Deep lemon yellow

YELLOW BETSY ROSS Nov. 5 S-4
Intermediate lemon yellow incurve. Exhibits some high temperature tolerance of parent variety. Shorter growth habit. Restrict flowering to under glass July 1-Oct. 1.

YELLOW RAYONNANTE Nov. 5 S-3
Yellow sport of Rayonnante. Straight tube. Requires high light and low temperature for strong stems.

YELLOW LEIGHTON Nov. 6 S-2
Large spider tube and hook. Lemon yellow sport of Susan Leighton.

YELLOW MARVEL  Nov. 8 P
Large, ball-shaped incurved. Deep lemon-yellow. A highly rated English standard with optimistic qualifications. Preliminary testing indicates it to be potentially a suitable high light, high temperature, summer and early fall variety. Flowers are durable and resist high temperature burn. Yellow Marvel is favored with strong possibilities to supplement Good News and strengthen summer standard programs.

GOLDEN CALYPSO  Nov. 3 P
Large incurve. Deep golden yellow sport from Yellow Calypso.

YELLOW CALYPSO Nov. 8 S-4
Large lemon yellow incurve. Very short. Exclusively a pot plant variety April 1-July 1; Sept. 1-Dec. 1. Sport of Bronze Calypso.

YELLOW DELAWARE Nov. 8 S-9
Intermediate deep lemon yellow incurve sport from Delaware. Pot plant programs the year around. The same valuable chassis in a brilliant new color.

GORDON WELLS Nov. 8 S-3
Intermediate lemon yellow incurve.

YELLOW QUEEN Nov. 10 S-5
Large light lemon semi-incurved. Standard Sept. 15-July 1.

YELLOW POCKETT Nov. 10 S-1
Large light lemon incurved exhibition.

YELLOW MEFO Nov. 10 S-7
Large deep lemon incurve. Standard Oct. 1-June 15.

CREAM MEFO Nov. 10 S-4
A cream colored sport from Mefo. Standard Sept. 15-June 15. Best form of the yellow Mefo's. Tolerates 56°.

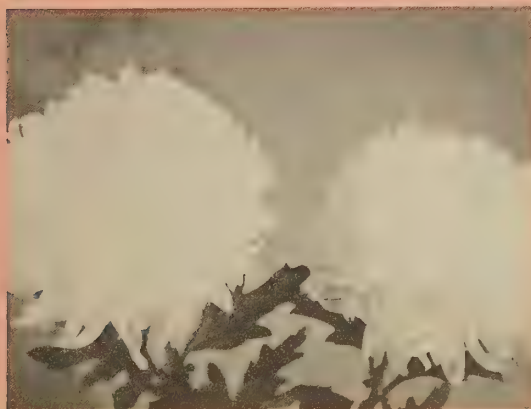
YELLOW MONUMENT Nov. 10 S-4
Intermediate light lemon incurve.

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Yellow Marvel




Mrs. Palmero (Page 139)

YELLOW STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

SCEPTER  **Nov. 10 P**
Large decorative. Deep golden yellow. Will tinge golden bronze with low temperature finish. Constitutes a yellow pink Deluxe for size and form. Similar breaking action and spread, but shorter in habit. Ideally suited for small sized pots as well as the six-inch pot.

GOLDEN SHOESMITH **Nov. 12 P**
Intensified color sport of Yellow Fred Shoesmith.

YELLOW SHOESMITH **Nov. 12 P**
Large Yellow incurve. Richly colored sport of Fred Shoesmith.

GOLDEN FAVOURITE  **Nov. 10 P**
Large semi-incurved standard. Bright yellow. Very responsive and durable. Seemingly resistant to high temperature burn. Short habit is benefited by an additional long day week. Has News size and form. Should handle like Albatross with potential for West Coast crops. Too short for northern winter programs. A striking single stem pot variety during high light periods.

YELLOW WAIKIKI **Nov. 13 S-2**
Large spider. Clear lemon-yellow sport from Waikiki.

11-WEEK VARIETIES (Pinch August 3)

LORRAINE **Nov. 15 S-1**
Lemon spider. Hooked tube.

YELLOW MARKETEE **Nov. 18 S-2**
Yellow sport from Marketeer.

BONNAFFON DELUXE **Nov. 20 S-9**
Intermediate deep lemon incurve. Number one pot variety for year-round culture. Requires 65° for uniform bud initiation.

FRIENDLY RIVAL **Nov. 20 S-4**
Intermediate intense golden yellow incurve.

HARVESTER **Nov. 23 S-5**
Intermediate deep lemon yellow incurve. Valuable for Thanksgiving.

MARIE DePETRIS **Nov. 23 S-4**
Intermediate deep yellow incurve.

12-WEEK VARIETIES (Pinch August 10)

YELLOW PETER JOHN **Nov. 25 S-2**
Large light lemon yellow decorative.

DARK YELLOW CHATTANOOGA **Nov. 25 S-4**
Deep lemon sport.

YELLOW CHATTANOOGA **Nov. 25 S-3**
Large light lemon incurve.

GOLDEN PEARSON **Nov. 25 S-3**
Intermediate light lemon incurve.

SUNGOLD **Nov. 25 S-2**
Large lemon yellow incurve. Used in natural pot programs.

YELLOW GLORY **Dec. 1 S-2**
Intermediate lemon yellow incurve. Color mutation from December Glory.

GOLDEN MRS. ROSS **Dec. 3 S-4**
Large deep lemon incurve.

GOLDEN MOELLER **Dec. 3 P**
Sport of Margaret Moeller.

13-WEEK VARIETIES (Pinch August 17)


CHALICE **Dec. 5 S-1**
Large lemon incurve.


TOBIN'S YELLOW **Dec. 10 S-5**
Intermediate deep lemon semi-incurve.

SMITH'S CREAM WHITE **Dec. 10 S-2**
A beautiful smooth cream colored sport for Smith's White.

METEORE **Dec. 13 S-4**
Intermediate deep lemon semi-incurve.

DAUNTLESS **Dec. 13 S-1**
Small golden yellow semi-incurve.

 **New Variety**

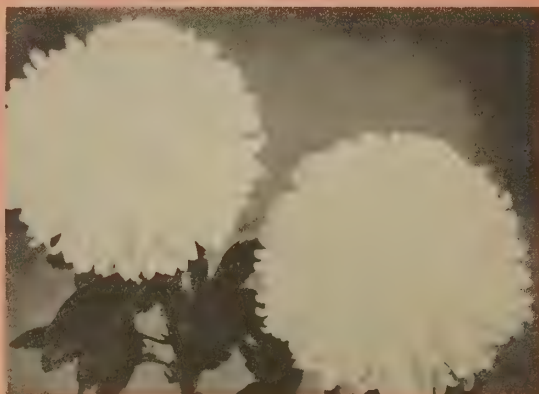
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Scepter



Golden Favorite

BRONZE & RED STANDARDS


Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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8-WEEK VARIETIES (Pinch July 13)


MAYFORD'S TRIUMPH Oct. 15 S-1
Large orange bronze decorative. Fast disbuds May and June.

AMBER BRIGHT Oct. 15 S-3
Large golden bronze decorative. Fast disbuds April 1-Dec. 1. Fine yellow disbud at high temperatures.


MAYFORD TITAN  Oct. 24 P
Intermediate incurved standard. Intense golden bronze. When finished cool it approaches Detroit News color. Superb form with News durability and substance. A tall, vigorous variety best grown on a pinched crop basis reaching its peak of perfection in May and June. Summer conditions induce crownish budding. An outstanding fast disbud, medium sized standard and bantamum for recommended periods.

9-WEEK VARIETIES (Pinch July 20)

HILDA BERGEN Oct. 25 S-1
Small reddish bronze incurve.

ZYLON  Oct. 25 S-1
Intermediate semi-incurve. Intense crimson red. Outstanding for color retention and resistance to fading. Usefully adapted to shading in fast disbud or small standard programs.

RED GLITTERS Oct. 28 S-1
Red sport of Glitters.

MRS. PALMERO  Oct. 28 P
Large semi-incurve standard. Maroon red. Responsive at all periods with excellent uniformity. Resemblance to Oak Leaf in size and form is strong. Stem is rigid and polished foliage attractive. Dependable, and easily done as a standard. It also shapes up well as a single stem pot in recommended periods.

BRONZE PALMERO  Oct. 28 P
Large semi-incurve. Coral bronze. Sport from Mrs. Palmiero.

DETROIT NEWS Nov. 1 S-7
Large reddish bronze incurve. Finish cool. Best all around bronze standard April and May; Sept. 15-Nov. 1.


ROYAL BRONZE Nov. 1 S-4
Intense orange bronze decorative. For pots Sept. 1-Dec. 1.

ANTIQUE Nov. 1 S-1
Copper bronze spider with strong stem.

IVANHOE Nov. 1 S-3
Small reddish bronze incurve. Fast disbuds Sept. 15-July 1.

APRICOT QUEEN Nov. 1 S-1
Large golden orange incurve.

DUCHESS Nov. 1 P
Medium to large bronze spider mum, sometimes called "Spindles" mum. Duplex form. All petals are straight and tubular. Good flower substance.

ALEX COLSON  Nov. 1 P
Large decorative. Intense orange bronze. A Royal Bronze color. Spreads well. breaks and responds uniformly. Excellent foliage. A vivid color that holds well in all periods. Best suited to pinched pot programs. A 9-week spring, summer and fall version of Calvert's Gold that completes the year round availability of this outstanding color.

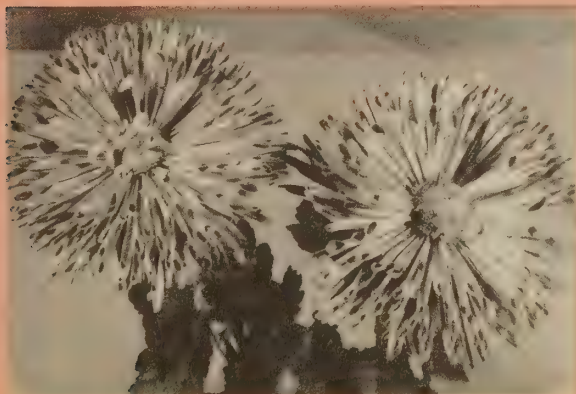
FRED YULE Nov. 3 S-4
Intermediate glowing orange bronze incurved standard. Establishes a new color standard. Fine addition to the standard and fast disbud crops in May and June also Sept. 1-Dec. 1. Vegetative during the winter months.

 New Variety  New Variety Growers Agreement

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Duchess



Mayford Titan

BRONZE & RED STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Pinch July 28)


GENA HARWOOD Nov. 5 S-3
Spider (Bronze Rayonnante).


NOMAGO Nov. 5 S-1
Light bronze spider.

MAMORU Nov. 5 S-1
Buff copper spider.

VULCAN  Nov. 5 P
Large decorative. Crimson red. A close companion to Red Star. In fall, winter and spring pot programs, the color is a brighter more intense red. Dulls to rapidly at high temperatures. Winning growth features make it a first class pot variety to supplement Valentine, and add greatly to the Christmas season.

RED STAR  Nov. 5 P
Large decorative. Red to reddish bronze. Dwarf pot habit. A profuse an dwire-angled breaking habit contributes to a shapely plant. Flowers are large and double. One of the very best for a bronze in summer pot programs. Equally good for single stem pots in its recommended period.

COSSACK  Nov. 5 P
Large decorative standard. Intense crimson red. Principal advantages are for single stem pot programs where it achieves unmatched size and color. Variety is sometimes reluctant to break from a pinch. Single stem, plant and shade pots for Christmas suggest important competition for poinsettias.

SANDROCK  Nov. 5 P
Small formal standard. Light bronze. Color of Indianapolis Apricot. Essentially a pot variety with a dwarf, responsive habit and excellent foliage. Pinched crops require high light conditions. Single stem pots are good the year round. Flower is hard and tightly incurved. Almost a true yellow under summer temperatures.

 New Variety  New Variety Growers Agreement

AVAILABLE APRIL 1, 1959

INDIANAPOLIS BRONZE Nov. 5 S-6
Large incurve. Standard and disbud program Sept. 15-June 15.

INDIANAPOLIS APRICOT Nov. 5 S-3
Intermediate warm apricot bronze incurve. A more versatile color than its parent Ind. Bronze. Size slightly smaller; habit stronger. Standard and fast disbud Sept. 15-June 1.

DARK INDIANAPOLIS BRONZE Nov. 5 S-6
Dark reddish bronze sport. Standard and fast disbud programs Sept. 15-June 15.

DELAWARE Nov. 8 S-9
A large reddish bronze semi-incurved standard. Outstanding for pot plants Sept. 1-June 1.

INCURVED DELAWARE Nov. 8 P
Large standard. Tightly incurved for mutation from Delaware.

BRONZE CALYPSO Nov. 8 S-3
Large, rich orange-bronze incurve and very short. Exclusively a pot plant variety April 1-July 1; Sept. 1-Dec. 1. Single pinch. Best results are obtained with high temperature initiation and low temperature development. Flower size and form closely resembles the Indianapolis varieties.

ANACONDA Nov. 8 S-3
Large red bronze incurve.

BRONZE ORCHID QUEEN Nov. 10 S-2
Buff coral bronze sport. Standards. Sept. 15-July 1.

 Growers Agreement



Incurved Delaware




Sandrock

BRONZE & RED STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

WORKING SCARLET  **Nov. 10 P**
Large decorative standard. Brilliant scarlet bronze. An exciting combination of color and habit for pots. Its living color glows, and will rapidly achieve top status along with Oregon and the Delawares as standard pot varieties. Endowed with sufficient vigor to be effective with plant, shade and an 18 day delayed pinch procedure. Equally striking as a single stem pot. A close proximity to the popular Poinsettia-red. This is it!

COPPER QUEEN **Nov. 10 S-4**
Large copper bronze incurve sport of Orchid Queen. Larger flower and more vigorous than Bronze Orchid Queen. Standard programs Sept. 15-July 1.

GARNET KING **Nov. 13 S-2**
Intermediate deep crimson red reflex.

MRS. ROY **Nov. 13 S-5**
Large red with copper reverse incurve. Standards Sept. 1-Dec. 1.

WAIKIKI **Nov. 13 S-2**
Spider. Red bronze tube. Yellow tips.

11-WEEK VARIETIES (Pinch August 3)

MRS. EISENHOWER **Nov. 18 S-1**
A vivid golden bronze spider mum with excellent substance and form.


BALCOMBE PERFECTION **Nov. 18 S-5**
Intermediate incurve. Copper bronze. Short variety benefited by two additional weeks time pinch to shade. Standard programs mid October through November. Very valuable for its natural Thanksgiving season.


RED BALCOMBE PERFECTION **Nov. 18 S-5**
Intermediate incurve. Bright red with copper bronze reverse. tional long day weeks pinch shade. Standard programs mid October through November. Outstanding for Thanksgiving.

CALVERT'S GOLD **Nov. 20 S-5**
Intermediate golden bronze semi-incurve. Standard and fast disbud Oct. 15-May 1. Pot plants Oct. 1-May 1.

BRONZE FRICK **Nov. 20 S-1**
Intermediate salmon bronze incurve.

VALENTINE **Nov. 20 S-6**
Large red disbud decorative. With one additional week pinch to shade Valentine provides fine medium size standards October through April. Significantly valued as an all winter pot plant with tall treatment especially appropriate for Christmas and Valentine's Day. In regular crops, disprayed to 3-4 flowers, it yields the equivalent of a red Goldsmith. Will initiate and develop buds at 52°

CALVERT'S ORANGE  **Nov. 20 P**
Large semi-incurve. Sport of Calvert's Gold. A capitivating reddish-orange. Habit is slightly shorter than Calvert's Gold. Essentially a pot variety that provides a Royal Bronze color with size and strong habit for northern pot plant programs through the fall and winter months.

BEACON  **Nov. 20 P**
Large semi-incurve. Rich reddish bronze with gold reverse. Has all the substance and durability of Detroit News with intensified and improved color retention. Moderately short and benefited by an additional long day week. Shades well and shows outstanding merit for the fall and Thanksgiving season.

12-WEEK VARIETIES (Pinch August 11)

BRONZE PETER JOHN **Nov. 25 S-2**
Large salmon rust suffused with yellow decorative. Intolerant of low temperature 60° minimum for bud initiation; 55° for bud development.

GLADYS PEARSON **Nov. 25 S-3**
Intermediate light copper bronze incurve.

OAK LEAF **Nov. 25 S-4**
Intermediate copper incurve.

MUTO'S CRIMSON **Dec. 1 S-2**
Intermediate deep crimson incurve. Copper reverse.



New Variety



New Variety Grows Agreement



Grows Agreement

AVAILABLE APRIL 1, 1959

SEE PRICE LIST ON PAGE 143



Cossack



Valentine


PINK STANDARDS

Variety	Description	Normal Flowering Date	Price	Variety	Description	Normal Flowering Date	Price
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8-WEEK VARIETIES (Pinch July 13)

PINK CHIEF		Oct. 15	S-4	MAJOR BOWES		Oct. 15	S-2
Large lavender incurve. Tall. Excellent in natural season.				Intermediate lavender incurve. Short.			

9-WEEK VARIETIES (Pinch July 20)

BLUE RIBBON		Nov. 1	S-7	BUNBU		Nov. 1	S-4
Small bright lavender pink incurve standard. Color markedly improves Queen of Pinks especially during high temperature periods. Responds sharply and develops well at 56° with additional stretch.				Large, fully double, spooned tip spider. Medium lavender pink color. Extreme vigor permits the reduction of one long day week from the 9-week schedule. Is a dependable performer in either the standard or fast disbud program from April thru November. Often requires some shade protection during the finishing period to prevent petal tip burn.			
MARY GARDEN		Nov. 1	S-3	BRIDESMAID 		Nov. 1	P
A pink spider. Tube.				Large spider. Light lavender pink. Dwarf, compact habit combined with good breaking action, spread and uniform response make for a superior pink spider available to pinched pot programs. For best summer color, crops should be grown in air cooled units.			
QUEEN OF PINKS		Nov. 1	S-5				
Small incurve. Excellent for pots Sept. 1-May 1.							

10-WEEK VARIETIES (Pinch July 27)

J. W. PRINCE		Nov. 5	S-3	VANGUARD 		Nov. 5	P
Intermediate lavender pink incurve.				Large incurved standard. Bright lavender pink. A vigorous Indianapolis seedling with vastly superior color retention under high temperatures. Should not be crowded, and is best suited to high light periods. It is tops in May and June standard and fast disbud programs.			
RAYONNANTE		Nov. 5	S-4	INDIANAPOLIS PINK		Nov. 5	S-8
Spider. Tube.				Large incurve. Tolerates 54°. Standards and fast disbuds Sept. 15-June 15.			
LOUBENS		Nov. 5	P	ORCHID QUEEN		Nov. 10	S-4
Large incurved standard. Deep lavender pink. Very short habit for pots. Overcrops when pinched but the best pink available for single stem pot programs. Its size, color and form are close to ideal for this purpose. A complete manifestation of qualities that single stem pot culture demands.				Large light orchid pink semi-incurve. Standard Sept. 15-July 1.			



New Variety



New Variety Growers Agreement



Growers Agreement

AVAILABLE APRIL 1, 1959



Bunbu



Vanguard

PINK STANDARDS

Variety	Description	Normal Flowering Date	Price
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Variety	Description	Normal Flowering Date	Price
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10-WEEK VARIETIES (Cont'd)

LAVENDER QUEEN Nov. 10 S-4

Lavender sport of Orchid Queen. Flowers more compact and color more intense than that of Dark Orchid Queen. Standards Sept. 15-June 15.

DARK ORCHID QUEEN Nov. 10 S-5

Large deep lavender semi-incurve. Standards Sept. 15-June 15.

LAUGHTER Nov. 10 S-4

Intermediate light lavender pink semi-incurved disbud. Comparable to Bluechip for high temperature finishing. Tall growth habit.

MERRIMENT Nov. 10 S-2

Large medium lavender pink decorative disbud. Fast, vigorous growing variety that will tolerate 56° for bud initiation. A worthy supplement to standards and fast disbuds.

PINK POCKETT Nov. 10 S-1

Large lavender pink incurved exhibition.

PINK YAMANE Nov. 10 S-2

Large lavender pink spider.

PINK F. SHOESMITH Nov. 12 P

Large incurve. Light pink sport from Fred Shoemith. Maximum color expression obtained only with cool finish. Habit and response are identical to parent variety. Best in late fall and Christmas period. Fred Shoemith and all of its sports are the most reliable when grown as pinched crops.

11-WEEK VARIETIES (Pinch August 3)

ARISTOCRAT Nov. 15 S-1

Intermediate lavender incurve. Fast stretch and strong stem. Natural season programs standards and disbuds.

CALVERT'S PINK Nov. 17 S-3

Intermediate orchid pink suffused with salmon incurve. Standard and pot plant programs November and December. Maximum 55° requirement for bud development. Rich color unsurpassed for Thanksgiving season.

ROSE DELIGHT Nov. 20 S-1

Intermediate to small semi-incurve. Lavender rose. Strong vigorous habit well suited to fast disbud and standard programs October through November. A valuable color for Thanksgiving.

HELEN FRICK Nov. 20 S-2

Intermediate light lavender incurve.

THANKSGIVING PINK Nov. 23 S-3

Intermediate orchid pink reflex.

ED. SEIDWITZ Nov. 23 S-2

Intermediate smooth lavender incurve. Standard and fast disbud Nov. 15-Feb. 1.

12-WEEK VARIETIES (Pinch August 10)

PINK PETER JOHN Nov. 25 S-2

Large light orchid pink decorative. Best size of Peter Johns. Intolerant of low temperature. 60° minimum for bud initiation; 55° for bud development.

DARK PINK PETER JOHN Nov. 25 S-2

Large deep orchid pink decorative.

13-WEEK VARIETIES (Pinch August 17)

PINK MISTLETOE Dec. 5 S-3

Intermediate light pink incurve. Finish cool.

PRICES

Quantity	S - 9	S - 8	S - 7	S - 6	S - 5
50 only	\$3.13	\$3.38	\$3.63	\$3.75	\$3.88
100 - 250	6.00	6.50	7.00	7.25	7.50
300 - 450	5.75	6.25	6.75	7.00	7.25
500 - 950	5.50	6.00	6.50	6.75	7.00
1000 up	5.25	5.75	6.25	6.50	6.75
Quantity	S - 4	S - 3	S - 2	S - 1	P
50 only	\$4.00	\$4.13	\$4.25	\$4.38	\$4.50
100 - 250	7.75	8.00	8.25	8.50	8.75
300 - 450	7.50	7.75	8.00	8.25	8.50
500 - 950	7.25	7.50	7.75	8.00	8.25
1000 up	7.00	7.25	7.50	7.75	8.00

EARNED CREDIT — Above prices are subject to an earned credit discount on orders from customers who are on continuous flowering programs. The percentage of earned credit is determined by order frequency, early ordering, fluctuations in size of order and total number of cuttings purchased and shipped during the year.

All prices are per 100 cuttings, except quantities less than 100. Fifty cuttings are priced per 50.

* Prices effective January 5, 1959.

Prices Subject to Change Without Notice

New Garden Varieties 1959

DEPETRIS INTRODUCTIONS

***SUDAN**

Oct. 10

Large golden reflexed decorative. Dark green lush foliage on sturdy stems. Flowers of excellent quality. Outstanding spring pot plant variety either as a 3" or 6" pot. One of the most beautiful large flowering field plants. Improved by disbudding.

HADLEY

Oct. 12

Large cream white semi-incurved. Husky sturdy stem with clean cut foliage. Responds well to disbudding. Can be used as an early disbud for normal planting or in the Cloth House through September. Makes an excellent field plant.

MONTEREY

Oct. 8

Large brilliant orange bronze semi-incurved—4" to 5" in diameter. A real beauty when disbudded. Sharp uniform response in early shade program.

***ELMIRA**

Oct. 12

Large cream white decorative. Compact and low growing. Eye-catching as a spring or fall garden pot plant. Lovely as a specimen plant or a border planting. One of the best in the group.

SPARTAN

Oct. 15

Large semi-incurved fresh looking white decorative. Responds well in the Cloth House during September or early greenhouse shadings. Improved considerably by disbudding. An absolute must in field plantings where the frost date will permit.

ARABY

Oct. 15

Deep crimson red decorative enhanced by lush green foliage. Its color and flower quality is unexcelled in its response group. Size is much improved by disbudding. Responds well to shade.

ORION

Oct. 5

Large soft yellow decorative. Short growing and compact. One of the loveliest yellow border plantings.

GLENDALE

Sept. 15

Medium yellow pompon. Short growing with a profusion of bloom. Sparkling yellow flowers enhanced by bright green foliage. One of the earliest of the new introductions.

WHITE***PRINCESS KAY**

Sept. 20

Heavy textured alabaster white decorative, strong stems supporting an abundance of flowers. Uniform response as a spring pot plant, overall appearance is very attractive.

***GRANNY LEHMAN**

Sept. 20

Pure white decorative with striking form. An excellent variety for spring pots using tall treatment. A very attractive yard or secondary border plant.

QUICKSILVER (H)

Sept. 25

Large creamy white decorative, compact growth and prolific blooming habit.

***JUDY**

Sept. 27

An attractive white button pompon. Flower heads are firm and the stems are stiff. Makes a very desirable spring pot plant.

***LARRY**

Oct. 1

Medium white pompon, overall habit is short and compact. Strengthens considerably the spring pot plant program.

GRACE BRADSHAW

Oct. 7

Very large decorative with satiny white petals. A husky vigorous tall growing variety, just right for table bouquets.

BLUSHWHITE

Oct. 7

Large crisp spoon. Chalk white flowers with a lavender tint. Complements our selection of white spoons.

YELLOW**GOLD BUTTON**

Sept. 10

Medium button pompon of golden yellow with orange centers. Overall appearance is very appealing. A good addition to the early yellows.

GOLDEN FANTASY

Sept. 20

Bright golden carnation type decorative. Vigorous growing habit with an abundance of blooms. Excellent for table bouquets.

New Garden Varieties 1959

SUNDANCE (U.S.D.A.)**Sept. 20**

Large lemon decorative that displays a striking mass effect. Long stems suitable for cutting.

BANTAM YELLOW**Sept. 25**

Short compact yellow cushion. Beautiful as a border plant.

HILITE**Sept. 25**

Large beautiful dahlia flared yellow decorative. Long stems just right for table decorations.

GOLDEN AGE

Large reflexed golden yellow. Very striking when disbudded. Particularly suited for garden cut flowers.

BUTTERSCOTCH (H)**Sept. 26**

Huge golden yellow decorative. Tall sturdy stems excellent for cutting.

MARIE HARTMAN**Sept. 28**

Large canary yellow decorative. New fresh flowers continually covering the old.

ORANGE**JOHN FURST****Oct. 5**

Full medium brilliant orange decorative. Clean cut looking sprays and stems. Excellent for garden cut flowers.

RED-BRONZE**VULCAN****Aug. 24**

Medium decorative. Dark red full double flowers on short branchy plants. One of the very earliest garden pompons.

TECUMSEH**Sept. 2**

Brick red to buff orange cushion. Short with a compact growth habit.

TRIBUTE**Sept. 14**

Large decorative bright daphne red maturing to daphne pink.

BRONZE GIANT**Sept. 22**

Large bronze decorative, especially suitable for garden cut flower use. Improved by disbudding.

DARK KNIGHT**Sept. 28**

Deep red decorative. Ruby crimson to maroon, finishes off in large showy clumps. Holds its color well.

RUTH SCOTT**Sept. 28**

Large semi-incurred golden bronze decorative. One of the best and most colorful big mums.

ROYALIST**Oct. 1**

Medium velvety ox-blood red pompon, exceptionally nice sprays suitable for cutting.

VINTAGE**Oct. 1**

Medium pompon of rich staid claret to spinet red. Tolerant of cool temperatures.

LAVENDER-PINK**WENONAH****Aug. 24**

Soft lavender pompon. One of the very earliest pinks.

TENSLEEP (U.S.D.A.)**Sept. 15**

Beautiful early rose pink cushion. Extremely hardy prolific blooming habit. Makes an outstanding early border plant.

MINNIPINK*Sept. 20**

A lovely rose pink cushion. Very compact with a profusion of bloom. Responds well for 3" or 6" spring pot culture.

GAMMY**Sept. 20**

Rose lavender pompon exquisite flower of fine substance and beauty. Extremely high production.

LOVELINESS**Sept. 25**

Carmine pink spoon with outstanding flower quality. Compliments our spoon selection.

MARY HARRISON**Sept. 26**

Semi-decorative glowing aster purple showing striking yellow centers.

LADY FAIR**Oct. 1**

A large decorative cactus type with deep lavender buds. Individual flowers measure 3" and responds nicely to disbudding. Tall growing habit.

CHAMPAGNE**Sept. 28**

Beautiful ivory shell pink blooms are produced on sturdy stems suitable for cutting.

PURPLE HEART**Sept. 28**

A very nice deep purple with a silvery reflex. Retains the color nicely throughout the blooming period.

Garden Varieties

SYMBOLS — (L) Large — (D) Decorative — (P) Pompon — (C) Cushion — (S) Single — (B) Button — (C-F) Carnation Flowered — (Sp) Spoon.

*Recommended for Spring pot plants pinched and short day treatment same day.

D Varieties recommended as better when disbudded.

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
WHITE					
Osage.....	(CD)	White	Short	Sept. 5	S-4
Candlelight.....	(D)	Ivory	Med.	Sept. 5	S-4
D. D. Ahrens.....	(D)	White	Tall	Sept. 10	S-4
Paper White.....	(D)	White	Med.	Sept. 10	S-6
*Crystal Maid.....	(DP)	Cream	Short	Sept. 12	S-4
*Chris Columbus.....	(LDP)	Cream	Tall	Sept. 15	S-5
White Cushion.....	(C)	White	Short	Sept. 15	S-7
*Gloria.....	(DP)	White	Med.	Sept. 15	S-4
*Calcite.....	(D)	Cream	Med.	Sept. 15	S-6
Powderpuff.....	(C)	White	Short	Sept. 15	S-6
Polar Ice.....	(D)	White	Med.	Sept. 15	S-5
*White Bounty.....	(BP)	Cream	Tall	Sept. 15	S-7
D White Tower.....	(LP)	Cream	Tall	Sept. 15	S-8
*Princess Kay.....	(D)	White	Med.	Sept. 20	P
Benora.....	(C)	White	Short	Sept. 20	S-2
*Granny Lehman.....	(D)	White	Med.	Sept. 20	P
White Sail.....	(D)	White	Med.	Sept. 23	S-2
White Wonder.....	(LP)	Ivory	Med.	Sept. 25	S-5
Jessamine Williams.....	(Sp)	White	Med.	Sept. 25	S-1
*Shalimar (H).....	(LD)	White	Med.	Sept. 25	S-5
Quicksilver (H).....	(LD)	Cream	Med.	Sept. 25	P
Theresa Stone.....	(P)	Cream	Med.	Sept. 25	S-3
White Rice.....	(LP)	White	Short	Sept. 25	S-5
*Ostosa.....	(CP)	White	Short	Sept. 25	S-2
White Cloud.....	(D)	White	Tall	Sept. 25	S-4
*Judy.....	(BP)	White	Short	Sept. 27	P
North Star.....	(S)	White	Med.	Sept. 28	S-5
*Pepita.....	(SBP)	White	Med.	Sept. 28	S-5
*Larry.....	(P)	White	Short	Oct. 1	S-3
Spindrift.....	(D)	White	Med.	Oct. 1	S-4
Gardenia.....	(LD)	White	Med.	Oct. 1	S-3
Grace Bradshaw.....	(LD)	White	Tall	Oct. 1	P
*Marshmallow.....	(S)	White	Med.	Oct. 5	S-3
Limelight.....	(D)	White	Med.	Oct. 5	S-4
Hadley.....	(D)	Cream	Tall	Oct. 5	P-1
Lyric.....	(S)	White	Short	Oct. 5	S-4
Avalanche.....	(LD)	White	Tall	Oct. 5	S-1
*Horizon.....	(D)	White	Med.	Oct. 5	S-3
Ivory Glow.....	(L)	Ivory	Med.	Oct. 5	S-6
Blushwhite.....	(LP)	White	Med.	Oct. 7	P
*Classic.....	(P)	White	Tall	Oct. 10	S-2
*Minnesota.....	(P)	White	Med.	Oct. 10	S-1
*Maestro.....	(P)	Cream	Short	Oct. 10	S-1
*Albion.....	(LD)	White	Med.	Oct. 10	S-3
White Masquerade.....	(B)	Silver	Med.	Oct. 10	P
White Spoon.....	(Sp)	White	Med.	Oct. 10	S-5
*Silverplate.....	(D)	White	Med.	Oct. 12	S-1
*Elmira.....	(LD)	Cream	Med.	Oct. 12	P
Michigan State.....	(LD)	White	Med.	Oct. 14	S-1
Spartan.....	(LD)	White	Tall	Oct. 15	P-1
Pilgrim.....	(P)	White	Med.	Oct. 15	S-1
Silver Ball.....	(LP)	White	Tall	Oct. 15	S-7
Irene.....	(B)	White	Med.	Oct. 15	S-1
Blizzard.....	(P)	White	Med.	Oct. 15	S-3
YELLOW					
Reverence.....	(LD)	Chamois	Short	Sept. 1	S-4
*Early Gold.....	(P)	Golden	Short	Sept. 5	S-2
Golden Hours.....	(P)	Chrome Yel.	Med.	Sept. 8	S-6
Gold Button.....	(BP)	Golden	Med.	Sept. 10	S-4

SEE PRICE LIST ON PAGE 151

Garden Varieties

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
YELLOW (Cont'd)					
Delight (H).....	(P)	Golden	Med.	Sept. 12	S-4
Genista.....	(D)	Canary Yel.	Med.	Sept. 12	S-4
Sunapee.....	(P)	Deep Lemon	Tall	Sept. 15	S-6
Pathfinder.....	(D)	Deep Lemon	Med.	Sept. 15	S-4
*Pomponette.....	(P)	Orange	Short	Sept. 15	S-6
Yellow Cushion.....	(D)	Light Yel.	Short	Sept. 15	S-7
Golden Cushion.....	(C)	Golden	Short	Sept. 15	S-7
Defiance (H).....	(D)	Golden	Tall	Sept. 15	S-4
*Yel. Chris. Columbus.....	(LD)	Brit. Lemon	Med.	Sept. 15	S-5
Muriel Rice.....	(LD)	Light Lemon	Med.	Sept. 15	S-4
*Early Yellow.....	(B)	Deep Lemon	Short	Sept. 15	S-6
Golden Carpet.....	(C)	Golden	Short	Sept. 15	S-4
Glendale.....	(P)	Yellow	Med.	Sept. 15	P-1
*D Ming.....	(P)	Golden	Med.	Sept. 18	S-4
Golden Fantasy.....	(CF)	Golden	Med.	Sept. 20	P
*Sept. Sunshine.....	(S)	Brit. Lemon	Med.	Sept. 20	S-6
*Aglow.....	(P)	Orange-Yel.	Med.	Sept. 20	S-1
Sundance.....	(D)	Lemon	Med.	Sept. 20	P
Real Gold.....	(LD)	Deep Golden	Med.	Sept. 20	S-4
Wychwood.....	(P)	Canary	Med.	Sept. 20	S-6
Canary Wonder.....	(LP)	Canary Yel.	Med.	Sept. 25	S-5
Bantam Yellow.....	(C)	Yellow	Short	Sept. 25	S-2
Golden Wonder.....	(LP)	Golden	Med.	Sept. 25	S-5
Chas. Nye.....	(LP)	Deep Lemon	Tall	Sept. 25	S-2
September Gold.....	(C)	Lemon	Short	Sept. 25	S-6
Golden Sunset.....	(LD)	Copper	Med.	Sept. 25	S-5
Hilite.....	(D)	Yellow	Tall	Sept. 25	P
*Honeycomb.....	(P)	Honey Yel.	Med.	Sept. 25	S-4
*Moonlight.....	(LD)	Brit. Yellow	Med.	Sept. 25	S-1
Lee Powell.....	(LD)	Chinese Yel.	Tall	Sept. 25	S-1
Golden Age.....	(P)	Golden Yel.	Tall	Sept. 25	P
Sulphur Spoon.....	(Sp)	Lt. Yellow	Med.	Sept. 25	S-4
Tangerine.....	(LD)	Deep Orange	Med.	Sept. 25	S-5
Butterscotch (H).....	(D)	Golden Yel.	Tall	Sept. 26	P
Astoria.....	(LD)	Deep Lemon	Med.	Sept. 28	S-3
Marie Hartman.....	(D)	Canary Yel.	Med.	Sept. 28	P
Yellow Supreme (H).....	(C)	Brit. Lemon	Short	Sept. 28	S-7
Ruby Breithaupt.....	(LD)	Primrose Yel.	Med.	Oct. 1	S-2
Freya.....	(LD)	Golden Yel.	Med.	Oct. 1	S-4
*Kings Ransom.....	(D)	Golden Yel.	Med.	Oct. 1	S-1
Tranquility.....	(D)	Lemon Yel.	Med.	Oct. 1	S-4
*Chiquita.....	(B)	Deep Lemon	Med.	Oct. 1	S-2
Ethel Waters.....	(L-Inc.)	Lt. Lemon	Med.	Oct. 5	S-3
James Eadie.....	(LP)	Deep Chrome	Med.	Oct. 5	S-4
Newton.....	(L-Cactus)	Golden Yel.	Med.	Oct. 5	S-3
Sudan.....	(LD)	Yellow	Med.	Oct. 5	P
*Illinois.....	(Inc.)	Brit. Golden	Med.	Oct. 5	S-1
Yellow Avalanche.....	(LD)	Lt. Lemon	Tall	Oct. 5	S-3
Orion.....	(LD)	Soft Yellow	Short	Oct. 5	P-1
Roulette.....	(LD)	Brit. Yellow	Short	Oct. 5	S-3
John Furst.....	(D)	Brit. Orange	Tall	Oct. 5	P
Polaris.....	(S)	Golden Buff	Med.	Oct. 5	S-1
Mrs. Rolan.....	(LD)	Deep Chrome	Med.	Oct. 5	S-4
Sunstone.....	(Sp)	Lt. Yellow	Tall	Oct. 8	S-4
*Spode.....	(L-Inc.)	Brit. Lemon	Short	Oct. 8	S-4
*Yellow Spoon.....	(Sp)	Lt. Yellow	Med.	Oct. 10	S-2
Treasure.....	(P)	Golden Yel.	Tall	Oct. 10	S-2
Golden Spoon.....	(Sp)	Golden Yel.	Med.	Oct. 10	S-5
*Yellow Blanket.....	(B)	Yellow	Med.	Oct. 10	S-6
Bright Forecast.....	(P)	Brit. Lemon	Tall	Oct. 10	S-3
Yellow Calumet.....	(P)	Lemon Yel.	Med.	Oct. 10	S-1
Arlora.....	(LD)	Brit. Lemon	Med.	Oct. 10	S-4
Michigan.....	(LD)	Clear Yellow	Med.	Oct. 12	S-1
Moonbright.....	(L-Inc.)	Soft Yellow	Med.	Oct. 12	S-4
Sunburst.....	(L-Cactus)	Golden Yel.	Med.	Oct. 12	S-1
*Gold Lode.....	(L-Inc.)	Brit. Yellow	Med.	Oct. 15	S-2
Judith Anderson.....	(B)	Brit. Lemon	Med.	Oct. 15	S-6

Garden Varieties

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
YELLOW (Cont'd)					
Rodell Imp.....	(B)	Lt. Lemon	Med.	Oct. 15	S-6
Yellow Irene.....	(B)	Lt. Lemon	Med.	Oct. 15	S-3
*Ohio State (H).....	(Cactus)	Golden Yel.	Med.	Oct. 15	S-1
Honeysweet.....	(L-Inc.)	Golden Yel.	Med.	Oct. 15	S-4
Sarasota.....	(P)	Br. Lemon	Med.	Oct. 15	S-4
*Iowa.....	(Inc.)	Br. Lemon	Med.	Oct. 15	S-1
BRONZE and RED					
Vulcan.....	(D)	Dark Red	Short	Aug. 24	P
Tecumseh.....	(C)	Brick Red	Short	Sept. 2	P
Glow Worm.....	(C)	Or. Scarlet	Short	Sept. 8	S-4
Early Harvest.....	(C)	Mah. Orange	Short	Sept. 8	S-2
Harbinger.....	(LD)	Golden Br.	Short	Sept. 8	S-3
*W. P. Snyder.....	(P)	Apricot Or.	Med.	Sept. 10	S-1
Autumn Song.....	(D)	Wine Rose	Med.	Sept. 10	S-4
Geo. Luxton.....	(LD)	Lt. Bronze	Med.	Sept. 12	S-4
Tribute.....	(LD)	Daphne Red	Med.	Sept. 14	S-2
Bronze Pomponette.....	(P)	Golden Br.	Short	Sept. 15	S-3
Early Crimson.....	(D)	Br. Crimson	Med.	Sept. 15	S-6
Apache.....	(LD)	Red & Gold	Med.	Sept. 15	S-4
Early Bronze.....	(B)	Orange Br.	Short	Sept. 15	S-6
Red Gold.....	(B)	Red & Gold	Med.	Sept. 15	S-5
Dark Red Gold.....	(B)	Dark Red	Med.	Sept. 15	S-5
New Marjorie Mills.....	(LP)	Ruby	Short	Sept. 15	S-3
Flamboyant.....	(D)	Orange Br.	Med.	Sept. 15	S-4
Early Kathleen.....	(D)	Coppery Br.	Med.	Sept. 15	S-4
Companion.....	(D)	Golden Br.	Med.	Sept. 15	S-3
Autumn Beauty.....	(D)	Chestnut Red	Med.	Sept. 15	S-4
September Bronze.....	(B)	Golden Br.	Med.	Sept. 20	S-6
*Toronto.....	(C)	Bronze	Short	Sept. 20	S-2
*Bronze Queen (H).....	(C)	Copper Br.	Short	Sept. 20	S-5
Red Glow.....	(P)	Dark Red	Med.	Sept. 20	S-5
*Orsona.....	(P)	Reddish Br.	Med.	Sept. 20	S-4
Scarlet Crimson.....	(D)	Bright Red	Med.	Sept. 20	S-5
Mme. Cadillac.....	(LP)	Raspberry	Short	Sept. 20	S-4
Bronze Giant.....	(LD)	Bronze	Tall	Sept. 22	P
Rouge Cushion.....	(C)	Bright Red	Short	Sept. 25	S-5
Br. Wonder.....	(P)	Bronze	Med.	Sept. 25	S-4
Plainsman.....	(D)	Golden Br.	Med.	Sept. 25	S-4
Crown Jewell.....	(D)	Bright Red	Short	Sept. 25	S-4
Champion Cushion.....	(C)	Deep Bronze	Short	Sept. 25	S-7
Commander Cushion.....	(C)	Red	Short	Sept. 25	S-7
Alpena.....	(D)	Dark Red	Med.	Sept. 25	S-4
Mahogany Cushion.....	(C)	Red	Short	Sept. 25	S-7
Elite Cushion.....	(C)	Salmon Br.	Short	Sept. 25	S-7
Holiday (H).....	(LD)	Golden Br.	Med.	Sept. 25	S-4
Football Bronze.....	(D)	Bronze	Tall	Sept. 25	S-4
Coppersmith.....	(DP)	Copper Br.	Med.	Sept. 25	S-4
Mojave Gold.....	(LD)	Golden Br.	Med.	Sept. 26	S-2
Crowning Glory.....	(D)	Coral Bronze	Med.	Sept. 28	S-4
Dark Knight.....	(D)	Deep Red	Med.	Sept. 28	P
*Remembrance.....	(D)	Dk. Carmine	Med.	Sept. 28	S-2
Lipsick.....	(C)	Ruby Orange	Short	Sept. 28	S-3
Kath. Lehman.....	(LD)	Orange Br.	Med.	Sept. 28	S-4
Ruth Scott.....	(D)	Golden Br.	Tall	Sept. 28	P
*Morocco.....	(C)	Reddish Br.	Short	Oct. 1	S-1
*Caprice.....	(LD)	Apricot Br.	Med.	Oct. 1	S-4
Admiration.....	(D)	Salmon	Med.	Sept. 28	S-6
*Iron Mountain.....	(P)	Deep Red	Med.	Oct. 1	S-5
Jubilee (H).....	(P)	Crimson Red	Med.	Oct. 1	S-4
Fiesta.....	(P)	Orange Rust	Tall	Oct. 1	S-5
Red Cloud.....	(C)	Scarlet Red	Med.	Oct. 1	S-6
Red Riding Hood.....	(D)	Bright Red	Med.	Oct. 1	S-4
Sam Williston.....	(C)	Deep Red	Short	Oct. 1	S-7

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Garden Varieties

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
BRONZE and RED (Cont'd)					
Leshara.....	(D)	Mulberry	Med.	Oct. 1	S-6
Bonfire.....	(D)	Bright Red	Med.	Oct. 1	S-3
*Red Mischief.....	(C)	Deep Red	Short	Oct. 1	P
Royalist.....	(P)	Ox-Blood	Med.	Oct. 1	P
Fire Engine.....	(S)	Flaming Red	Med.	Oct. 1	S-6
Vintage.....	(P)	Claret Red	Med.	Oct. 1	P
Card. Spoon.....	(Sp)	Red Bronze	Med.	Oct. 5	S-3
Firecracker.....	(D)	Mah. Bronze	Tall	Oct. 5	S-4
Cydonia.....	(D)	Mah. Bronze	Tall	Oct. 5	S-6
*September Cheer.....	(S)	Cherry Red	Med.	Oct. 5	S-6
Burgundy.....	(LP)	Wine Red	Tall	Oct. 5	S-1
*Red Velvet.....	(LD)	Dk. Crimson	Med.	Oct. 5	S-1
*Mona.....	(P)	Rust Bronze	Med.	Oct. 5	S-4
Indian Red.....	(D)	Rust	Med.	Oct. 5	S-6
Courageous.....	(D)	Ruby Red	Med.	Oct. 5	S-1
*Mrs. Du Pont.....	(LD)	Coral Buff	Tall	Oct. 8	P-1
Monterey.....	(L-Inc.)	Bril. Orange	Tall	Oct. 8	P
Andante.....	(LD)	Peach Apricot	Tall	Oct. 8	P-1
Araby.....	(D)	Crimson	Tall	Oct. 8	S-4
Aviator.....	(P)	Copper	Med.	Oct. 8	S-4
Gladiator.....	(LD)	Orange Red	Med.	Oct. 10	S-2
*D Calumet (H).....	(LD)	Apricot	Med.	Oct. 10	S-1
D Dark Calumet (H).....	(D)	Bronze	Med.	Oct. 10	S-2
*Dolli-Ette.....	(Sp)	Golden Br.	Med.	Oct. 10	S-1
Huntsman.....	(LD)	Scarlet Or.	Tall	Oct. 10	S-2
Carnival.....	(P)	Burnt Orange	Med.	Oct. 10	S-1
Carmine Queen.....	(P)	Carmine Red	Tall	Oct. 10	S-1
Northwestern.....	(Inc.)	Red Bronze	Med.	Oct. 10	S-1
*Indiana.....	(Cactus)	Bronze	Med.	Oct. 12	S-4
Admiral.....	(P)	Dark Red	Med.	Oct. 12	S-1
*Purdue (H).....	(Inc.)	Bronze	Med.	Oct. 12	S-4
Crusader.....	(D)	Crimson Red	Med.	Oct. 15	S-2
*Radiance.....	(D)	Red	Med.	Oct. 15	S-1
*James Stewart.....	(P)	Apricot Gold	Tall	Oct. 15	P
*Majestic.....	(Inc.)	Bronze	Med.	Oct. 15	S-1
Red Enterprise.....	(P)	Rose Red	Tall	Oct. 15	P
Resolute.....	(D)	Bright Red	Med.	Oct. 15	S-1
Wisconsin.....	(Inc.)	Apricot Br.	Med.	Oct. 15	S-1
Rajah.....	(S)	Scarlet Red	Tall	Oct. 15	S-2
Helma.....	(D)	Rich Red	Med.	Oct. 15	S-2

PINK and LAVENDER

Wenonah.....	(P)	Soft Lavender	Med.	Aug. 24	P
Gladness.....	(DP)	China Rose	Short	Aug. 28	S-4
Cecil Beed.....	(D)	Deep Lav.	Med.	Sept. 1	S-6
Sal. Precose.....	(LD)	Salmon Pk.	Short	Sept. 1	S-4
Amelia.....	(C)	Lav. Pink	Short	Sept. 5	S-7
Rosa.....	(C)	Rose Pink	Med.	Sept. 5	S-6
Dean Kay.....	(C)	Shell Pink	Short	Sept. 5	S-7
Purple Star.....	(DP)	Bril. Purple	Med.	Sept. 5	S-5
*Joan Helen.....	(D)	Dk. Purple	Med.	Sept. 10	S-6
Nye's Favorite.....	(LD)	Lavender	Med.	Sept. 10	S-6
*Orchid Helen.....	(D)	Orchid Lav.	Med.	Sept. 10	S-4
Lorenzo.....	(Sp)	Dk. Purple	Med.	Sept. 15	S-4
Royal Robe.....	(D)	Dk. Purple	Med.	Sept. 15	P
Tensleep.....	(C)	Rose Pink	Med.	Sept. 15	S-5
Chippewa.....	(D)	Bril. Purple	Med.	Sept. 15	S-6
Violet.....	(D)	Bril. Purple	Med.	Sept. 15	S-4
Purple Spoon.....	(Sp)	Soft Purple	Med.	Sept. 20	S-5
Tapestry.....	(D)	Salmon Pk.	Med.	Sept. 20	S-4
*Minnpink.....	(C)	Rose Pink	Short	Sept. 20	S-4
*Purple Waters.....	(D)	Deep Purple	Med.	Sept. 20	P
Gammy.....	(P)	Rose Lav.	Med.	Sept. 20	S-6
Heather Bloom.....	(D)	Heather Pink	Med.	Sept. 20	S-6

SEE PRICE LIST ON PAGE 151

Garden Varieties

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
PINK and LAVENDER (Cont'd)					
*Alert.....	(LD)	Dark Purple	Med.	Sept. 20	S-3
*Blanche Litwiller.....	(LP)	Lav. Pink	Med.	Sept. 23	S-2
*Pink Quill.....	(LD)	Shell Pink	Med.	Sept. 25	S-2
Olive Longland.....	(D)	Salmon Pink	Med.	Sept. 25	S-7
Evangeline.....	(LD)	Flesh Pink	Tall	Sept. 25	S-4
*Jeweltone.....	(P)	Rose Pink	Short	Sept. 25	S-4
Lady's Choice.....	(LD)	Ivory Pink	Med.	Sept. 25	S-4
*Reflection.....	(D)	Rosy Lav.	Med.	Sept. 25	S-4
*Petrisian Rose.....	(P)	Lav. Rose	Med.	Sept. 25	S-5
*Cecelia.....	(D)	Purple	Short	Sept. 25	S-7
Imp. Early Wonder.....	(P)	Lav. Pink	Med.	Sept. 25	S-5
*Spellbound.....	(D)	Bril. Lavender	Med.	Sept. 25	S-3
Capt. J. Smith.....	(C)	Lav. Pink	Short	Sept. 25	S-7
Evelyn Devaney.....	(D)	Shell Pink	Med.	Sept. 25	S-4
Purple Cushion.....	(C)	Deep Purple	Med.	Sept. 25	S-6
*Major Cushion.....	(D)	Lavender	Short	Sept. 25	S-7
Coquette.....	(C)	Rosy Pink	Short	Sept. 25	S-4
Loveliness.....	(Sp)	Carmine Pink	Med.	Sept. 26	P
Edna Rowley.....	(B)	Lav. Pink	Med.	Sept. 26	S-2
Mary Harrison.....	(D)	Purple	Med.	Sept. 26	P
Tuneful.....	(P)	Rose Pink	Tall	Sept. 28	S-4
Purple Heart.....	(D)	Purple	Med.	Sept. 28	P
Rosita.....	(B)	Lt. Lavender	Med.	Sept. 28	S-6
*Joyous.....	(C)	Lavender	Short	Sept. 28	S-4
Betty.....	(D)	Pink Rose	Tall	Sept. 28	S-6
*Twinkle.....	(C)	Deep Rose	Med.	Sept. 28	S-6
Pat. Lehman.....	(D)	Peach Pink	Tall	Sept. 28	S-4
Stylish.....	(Cactus)	Old Rose	Med.	Sept. 28	S-2
*Aristocrat (H).....	(LD)	Deep Wine	Med.	Sept. 28	S-4
Champagne.....	(D)	Shell Pink	Tall	Sept. 28	P
Artist's Delight.....	(D)	Coral Pink	Med.	Sept. 29	S-2
Lady Fair.....	(Cactus)	Orch. Pink	Med.	Oct. 1	P
Troubadour.....	(D)	Rose Crimson	Med.	Oct. 1	S-5
Tiffany Rose.....	(S)	Deep Rose	Med.	Oct. 1	S-7
Old Lavender.....	(LD)	Bril. Lavender	Med.	Oct. 1	S-3
Sonny.....	(P)	Salmon Pink	Med.	Oct. 1	S-6
Helen Bogue.....	(LD)	Rose Purple	Tall	Oct. 1	S-2
Mayflower.....	(P)	Luminous Pk.	Med.	Oct. 1	S-4
*Mischief.....	(S)	Purple	Short	Oct. 1	S-3
Charm Spoon.....	(Sp)	Rose	Med.	Oct. 1	S-4
Alex Cummings.....	(D)	Rose Pink	Tall	Oct. 3	S-3
Northern Queen.....	(LD)	Rose Pink	Med.	Oct. 5	S-4
*Petrisian Pink.....	(D)	Light Pink	Med.	Oct. 5	S-5
*Lavender Lady.....	(D)	Lavender	Tall	Oct. 5	S-4
Dream Girl.....	(P)	Lt. Lavender	Med.	Oct. 10	S-3
*Courtier.....	(D)	Lavender	Med.	Oct. 10	S-4
*Time.....	(P)	Deep Lav.	Med.	Oct. 10	S-4
*Orchid Spoon.....	(Sp)	Orchid	Med.	Oct. 10	S-6
Rose Spoon.....	(Sp)	Rose Pink	Med.	Oct. 10	S-5
Lassie.....	(LD)	Deep Pink	Med.	Oct. 10	S-4
*Masquerade.....	(B)	Lavender	Med.	Oct. 10	S-5
*Joybringer.....	(D)	Lav. Rose	Short	Oct. 10	S-2
Allegro.....	(C)	Shrimp Pink	Med.	Oct. 12	S-4
*Fuchsia Fairy.....	(D)	Light Pink	Short	Oct. 14	S-2
Cupid.....	(D)	Pink	Med.	Oct. 15	S-1
*Jewell.....	(B)	Lavender	Med.	Oct. 15	S-1
Enterprise.....	(P)	Amaranth Rose	Tall	Oct. 15	S-1
Lt. Pink Enterprise.....	(P)	Light Pink	Tall	Oct. 15	S-2
Elizabeth Hood.....	(D)	Lt. Lavender	Med.	Oct. 15	S-1

Garden Varieties

COLLECTION PRICES PER 100

300 - 450	500 - 950	1000 Up
\$6.00	\$5.75	\$5.50

GARDEN VARIETY COLLECTIONS

For growers who are not familiar with Garden Varieties, but who wish a well balanced assortment, we offer the following collections which include the better varieties for each specific purpose.

COLLECTION No. 1

Taller varieties for cut flowers

COLLECTION No. 2

Varieties for bedding or borders

COLLECTION No. 3

50% for Cut Flowers
50% for Bedding or Borders

COLLECTION No. 4

Varieties suitable for Easter,
Mother's Day or Memorial Day pots

COLLECTION No. 5

Cushion varieties only

PRICE TABLE

(All prices per 100 cuttings. Fifty cuttings are priced per 50.)

Class	Price 50 Only	100- 250	300- 450	500- 950	1000 Up	Class	Price 50 Only	100- 250	300- 450	500- 950	1000 Up
S-9	3.13	6.00	5.75	5.50	5.25	S-3	4.13	8.00	7.75	7.50	7.25
S-8	3.38	6.50	6.25	6.00	5.75	S-2	4.25	8.25	8.00	7.75	7.50
S-7	3.63	7.00	6.75	6.50	6.25	S-1	4.38	8.50	8.25	8.00	7.75
S-6	3.75	7.25	7.00	6.75	6.50	P	4.50	8.75	8.50	8.25	8.00
S-5	3.88	7.50	7.25	7.00	6.75	P-1	5.50	9.75	9.50	9.25	9.00
S-4	4.00	7.75	7.50	7.25	7.00						

EARNED CREDIT — The above prices are subject to an earned credit discount which is given to those accounts who qualify on the basis of frequency of shipment and total number of cuttings purchased during the year.

GROUP PRICING (advance orders) — To encourage the placing of advance orders for a series of shipments, we offer the lowest price in accordance with the quantity ordered on any particular variety. For example, a customer who orders 100 cuttings of a variety, 10 weekly shipments would receive the 1000 price on each shipment of that variety.

PRICES EFFECTIVE JANUARY 5, 1959

(Prices subject to change without notice)

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INSECTICIDES *Fungicides & Fumigants*

ARAMITE 15W4-lb. bag \$ 3.20

CHLOROBENZILATE 25W4-lb. bag \$ 3.20
Case (12, 4-lb. bags) 52.80

DDT—50 WETTABLE4 lbs. 2.00
48 lbs. (12, 4-lb. bags) 20.00

ENDRIN 1.61 gal. 11.90

FERBAM (FERMATE)3 lbs. 2.00
Case (12, 3-lb. bags) 21.00

FULEX

Parathion Fumigators

For Red Spiders, Aphids and Thrips on florist crops.
Carton (24 cans)

2,000 cu. ft.\$11.50 10,000 cu. ft.\$17.00
5,000 cu. ft. 14.50 20,000 cu. ft. 26.00

Aphid-Smoke Fumigators

For Aphids and Adult White Flies on florist crops.
Carton (24 cans)

2,000 cu. ft.\$11.00 10,000 cu. ft.\$17.00
5,000 cu. ft. 14.00 20,000 cu. ft. 25.00

Spider-Mite Fumigators

For Red Spiders, including some Parathion-resistant strains on carnations, chrysanthemums and snapdragons.

Carton (24 cans)

2,000 cu. ft.\$11.50 10,000 cu. ft.\$19.00
5,000 cu. ft. 14.50 20,000 cu. ft. 31.00

GRASSELLI SPREADER STICKER 1 gal. 7.95

KELTHANE EMULSION 18.5gal. 11.00
Case (4-1 gal.), per gal. 10.80

KELTHANE WETTABLE 18.54-lb. bag \$ 5.80
Case (12, 4-lb. bags) 52.80

MALATHION 4 lb. 25% wettable powder..... 3.60
1 gal. 50% emulsion..... 14.80

MILDEX3-lb. bag 6.70

NICOTINE FUMIGATORS (Fulex)—Gives efficient results on Greenhouse Aphids and most Thrips. Contains 14% nicotene (alkaloid).
10,000 cu. ft. size (carton of 12)..... 9.60
20,000 cu. ft. size (carton of 12)..... 16.20

OPTOX (10% DDT)gal. 12.00

ORTHOCIDE 50W (Captan).....Carton (10, 5-lb.) 42.50
5 lbs. 4.75

PLANTFUME 103 5,000 cu. ft. carton—36 12.00
20,000 cu. ft. carton—12 12.00

PARATHION SPRAY (15% Wettable)....4-lb. bag 2.70

PARZATE

Powder3-lb. bag 3.30
Case (36 lbs.) 36.00

P-4025 lbs. 20.00
50 lbs. 37.50 100 lbs. 70.00

SODIUM SELENATE (Pure).....4 oz. 4.00
1 lb. 12.50

SNAROL6 lb. 2.00
50 lbs. 9.75

SNAILCIDE5 lbs. 4.00 20 lbs. 13.00

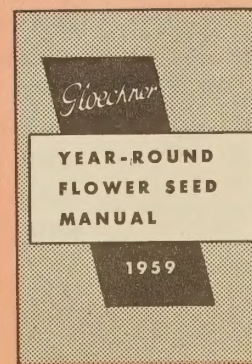
TERRACHLOR 75WP—Controls rhizoctonia stem rot by inhibiting growth of fungus.....5 lb. 4.75
Case (10, 5-lb. bags) 45.00

VAPATONE XX1-gal. can 12.50

We can supply you with any insecticide or fungicide not listed above. Prices subject to change without notice.



For your bulb and foliage plant requirements see your *Gloeckner* representative. Consult him on your Flower Seed and Carnation plants and send for your *Gloeckner* Carnation and Flower Seed Manuals. They are available upon request.



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FLOWER HOLIDAY CALENDAR

YEAR	VALENTINE'S DAY	EASTER	MOTHER'S DAY	MEMORIAL DAY	SWEETEST DAY	THANKSGIVING	CHRISTMAS
1959	FEB. 14	MARCH 29	MAY 10	MAY 30	OCT. 17	NOV. 26	DEC. 25
1960	FEB. 14	APRIL 17	MAY 8	MAY 30	OCT. 15	NOV. 24	DEC. 25

1959

1960

JANUARY

Sun	Mon	Tue	Wed	Thur	Fri	Sat
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
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JULY

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JANUARY

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AUGUST

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DECEMBER

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